APPENDIX B

INPUT DATA BASES, EMISSIONS RESULTS, AND OIL REFINING MARGINAL EMISSIONS ANALYSIS

Appendix B includes the information used to calculate fuel-cycle emissions, emission results, and a discussion of marginal emission considerations. The following information is included:

SPROF2.XLS
FELOW.XLS
EFAC9.XLS
VIEW30.XLS
RSLTSGPG.XLS
RSLTSGPM.XLS

WSPA, "Fuel Cycle Emissions Benefits of Alternative Fuels -- The Need to Consider Marginal Emissions," September, 1993

Nowell, G. P., "Oil Company Analysis of Fuel Cycle," July 1994

Table B-1 identifies the fields for each database. The last two data bases are the output of a relational database calculation with the first 4 databases. The VIEW database is shown twice. The second configuration is sorted more closely by emission source rather than by scenario. This sorting allows for a better comparison with emissions in Section 5 of the main report.

Table B-1. Summary of Input Data Bases (Continued)

Field Name	Description
SPROF2.XLS	
PROFILE	Identifies MIR and MOR factors for various emission sources. PROFILE field in SPROF.XLS is referenced by PROFILE field in EFAC*.XLS[a]
MIR	Specific MIR, gO_3/gNMOG
MOR	Specific MOR, gO_3/gNMOG
FELOW.XLS	
CaseCode	Corresponds to case code in Table 5-48 as well as subsequent databases.
Fuel	Fuel
Scenario	Scenario
FE	Fuel Economy in mi/unit fuel
VIEW*.XLS	
CC	Case Code related to VIEW* and FELOW databases (Table 6-3)
Fuel	Fuel
Sc	Scenario (Table 1-2)
Ph	Phase (Table 6-2)
SC	Percent emissions in SC
CA	Percent emissions in CA excluding SC
US	Percent emissions in US excluding US
ROW	Recent of emissions outside the US
EM1 .. EM4	Emission source code combined with Fuel Code that identifies emission factor in EFAC*.XLS
FC	Fuel Code
PhWt	Phase Weight = A × CD × Use
A, CD, Use	Weighting factors discusses in Section 5.4
VIEW*FC.XLS	The same information as VIEW*.XLS. This file is sorted according to EMi and FC in order to provide a better correspondence to emission sources in Section 5.

[a] * refers to file name with numerical designation subject to update.

Table B-1. Summary of Input Data Bases (Concluded)

Field Name	Description
EFAC*.XLS	
FC, EMi	Fuel Code and EMi in EFAC* are related to FC and EMi fields in VIEW* data base
Description	Description of emission source
NOx .. CO2	Emission rate in the indicated units
Btu	Energy use in Btu/indicated unit
PROFILE	Profile number related to SPROF2 database
UNITS	Units for emission rates
EMi	Conversion factor to calculate g/unit end use fuel
NOx .. CO2	Emissions in g/unit end use fuel
Btu	Energy use in g/unit end use fuel
RSLTSGPG.XLS	
FUEL	Fuel
FEEDSTOCK	Feedstock
CA	Case Code (Table 6-3)
SC	Scenario (Table 1-2)
PH	Phase (Table 6-2)
_SC	Emissions in the South Coast Air Basin, g/unit fuel
_CA	Emissions in California excluding the South Coast Air Basin
_US	Emissions in the U.S. Excluding California
_RW	Emissions outside the U.S.
RSLTSMPG.XLS	
EMISSION	Emissions of NMOG, CH_4, NO_x, CO, CO_2. Energy use in Btu, and Ozone potential on MIR and MOR basis (NMOG*MIR + $CH_4 \times 0.0148$)
FUEL	Fuel
CC	Case Code (Table 6-3)
SC	Scenario (Table 1-2)
LOCATION	Emissions in the South Coast Air Basin, g/mi
	Emissions in California excluding the South Coast Air Basin
	Emissions in the U.S. Excluding California
	Total world-wide emissions. The sum of SC, CA, US, and ROW
EXTRACTIO	Emissions for Phases 1 through 8 lumped according to Table 6-2
PRODUCTIO	
MARKETING	
DISTRIBUTE	

Specific Reactivity for Various Emission Sources (gO3/gNMOG)

PROFILE	(gO3/gNMOG) MIR	MOR	Description	Reference
3	2.272	0.9116	External Combustion Boiler Natural Gas	ARB
4	2.774	1.161	Boilers, refinery gas	ARB
7	0.41	0.18	Assumed profile for NG turbine exhaust	Profile 1001
9	5.77	2.37	Stationary reciprocating diesel engine [a]	SPECIATE
29	6.094	1.858	Refinery Boiler FCC	ARB
31	1.081	0.6779	Refinery-covered drainage separation pits, fugitve	ARB
35	1.38	0.87	Refinery cooling towers fugitive	ARB
51	2.1	0.7102	Refinery flares - NG	ARB
53	0.8483	0.5038	Refinery catalytic reformer - fugitive emissions	ARB
211	0.7719	0.41	Beer fermentation ethanol production	ARB
217	2.607	1.032	Coke oven blast furnace - process gas	ARB
297	0.919	0.567	Oil evaporation, fixed roof tanks	SPECIATE
305	0.84	0.55	Crude oil evaporation, ship storage	SPECIATE
316	0.9656	0.5956	Refinery pipes, valves & flanges	ARB
321	1.099	0.6231	Refinery pump seals composite	ARB
504	2.182	0.9704	External combustion boilers, distillate or residual	ARB
520	0.314	0.2089	Composite natural gas [a]	ARB
521	0.6514	0.379	Composite LPG [a]	ARB
529	1.019	0.6232	Oil and gas extract pipeline valves & fittings	ARB
530	1.022	0.6241	Oil and gas extraction pumps and seals	ARB
531	1.02	0.624	Oil and gas extraction compressor seals	ARB
532	1.023	0.6244	Oil and gas extraction compressor seals	ARB
535	2.338	1.057	Coal combustion -bituminous fluid bed	ARB
560	2.788	1.124	On-road diesel hot exhaust w/o aldehydes	ARB
561	2.788	1.124	Diesel exhaust with aldehydes	ARB
709	3.054	1.156	Compostite summer gasoline liquid [a]	ARB
710	1.934	0.9998	Compostite summer gasoline vapor [a]	ARB
719	1.532	0.6678	NG IC engine	ARB
760	0.8585	0.5508	Diesel vapor	ARB
816	4.607	1.72	Farm equipment diesel hot exhaust	ARB
817	3.812	1.414	Utility gasoline engine hot exhaust	ARB
1001	0.41	0.18	NG engine exhaust	SPECIATE
1011	0.997	0.609	Oil production fugitives, valves & fittings	SPECIATE
1012	0.89	0.55	NG processing fugitives, vlvs & fittings	SPECIATE
1014	1.88	0.95	Smr blnd gasoline fxd roof vents	SPECIATE
1070	0.61	0.39	Methanol prod. purge vents	SPECIATE
1071	0.62	0.4	Methanol production distillation vent	SPECIATE
1084	1.75	0.77	Biomass boiler exhaust	SPECIATE
1185	2.57	0.96	Coal boiler exhaust	SPECIATE
1190	1.62	0.49	Gasoline marketing vapor [a]	SPECIATE
1207	1.2	0.66	Crude oil drilling water flood of well heads	SPECIATE
2000	0	0	Zero ozone potential	--
8100	2.272	0.9116	Gasifier purge, biomass	Profile 3
8101	2.272	0.9116	Gasifier purge, coal	Profile 3
8102	2.272	0.9116	POX purge vent	Profile 3
8103	2.272	0.9116	NG reformer	Profile 3
8105	2.272	0.9116	LPG combustion	Profile 3

Specific Reactivity for Various Emission Sources (gO3/gNMOG)

PROFILE	(gO3/gNMOG) MIR	MOR	Description	Reference
8200	0.56	0.28	Methanol production and marketing	M100
8203	2.272	0.9116	NG productin and marketing composite	Profile 3
9001	2.64	0.96	Indolene liquid [a]	Furey
9002	1.41	0.79	Indolene vapor [a]	Furey
9003	2.94	1.12	1986 RUL liquid liquid [a]	Furey
9004	1.41	0.082	1986 RUL vapor [a]	Furey
9005	3.22	1.20	RF-A liquid [a]	Auto Oil
9006	2.56	0.86	RF-C liquid [a]	Auto Oil
9007	1.96	0.88	RF-A diurnal evaporative composition [a]	Auto Oil
9008	2.03	0.79	RF-C diurnal evaporative composition [a]	Auto Oil
9009	3.62	1.32	ARCO unreformulated premium [a]	Boekhaus
9010	3.37	1.20	ARCO EC-P gasoline [a]	Boekhaus
9011	3.07	1.16	ARCO Unleade regular gasoline [a]	Boekhaus
9012	2.38	1.04	ARCO EC-1 [a]	Boekhaus
9051	2.06	0.9116	Natural gas flares (No. 51)	SPECIATE
9794	1.63	0.86	Phase 2 storage tank	FC Section 3 [b]
9795	3.42	1.96	RFG Base/TLEV car exhaust, RF-C	Auto Oil
9796	2.421	0.9586	Phase 2 liquid	FC Section 3
9878	1.24	0.745	E85 Storage tank	FC Section 3
9879	1.24	0.745	E85 vapor vehicle	FC Section 3
9880	1.4668	0.7576	E85 liquid	FC Section 3
9950	2.788	1.124	Diesel truck exhaust with aldehydes	ARB 561
9951	3.42	1.96	Gasoline Base/TLEV car exhaust, RF-A	Auto Oil
9974	2.82	1.7	RFG exhaust	Auto Oil
9978	1.22	0.655	M85 vapor, storage tank	FC Section 3
9979	1.22	0.655	M85 vapor vehicle	FC Section 3
9980	0.7856	0.3611	M85 liquid	FC Section 3
9982	1.35	0.054	Diesel liquid estimate	Estimate
9991	0.482	0.311	LPG composition (natural gas derived) [a]	FC Section 3
9989	1.34	0.72	E100 liquid/ vapor	E100
9990	0.56	0.28	M100 liquid/ vapor	M100
9991	0.703	0.401	LPG composition (petroleum derived)	FC Section 3
9992	0.416	0.275	LNG composition	FC Section 3
9993	0.416	0.275	CNG composition	FC Section 3
9994	1.81	0.93	RFA storage tank	FC Section 3
9995	1.81	0.93	RFA vapor vehicle	FC Section 3
9996	3.1149	1.1696	RFA liquid	FC Section 3

[a] Interesting profiles not used in this study

[b] Calculated from information in Section 3 of this Study.

SPROF2.XLS

CaseCode	Fuel	Scenario	FE mi/unit
oG	Gasoline	1	23.00
oR	RFG	1	22.52
oD	Diesel	1	31.28
oP	LPG	1	16.54
nN	M85	1	13.48
bN	M85	1	13.48
nM	M100	1	11.93
bE	E85	1	17.13
nC	CNG	1	18.50
nL	LNG	1	14.53
nH	H2	1	10.80
xJ	Elect	1	2.86
oG	Gasoline	2	27.50
oR	RFG	2	26.93
oD	Diesel	2	37.40
oP	LPG	2	20.37
nN	M85	2	15.80
bN	M85	2	15.80
nM	M100	2	14.26
bE	E85	2	20.10
nC	CNG	2	22.78
nL	LNG	2	17.89
nH	LH2	2	24.59
xJ	Elect	2	4.00
oG	Gasoline	3	27.50
oR	RFG	3	26.93
oD	Diesel	3	37.40
oP	LPG	3	20.37
nN	M85	3	15.80
bN	M85	3	15.80
nM	M100	3	14.26
bE	E84	3	20.10
nC	CNG	3	22.78
nL	LNG	3	17.89
nH	LH2	3	24.59
xJ	Elect	3	4.00
oG	Gasoline	4	32.00
oR	RFG	4	31.33
oD	Diesel	4	43.52
oP	LPG	4	24.17
nN	M85	4	18.75
bN	M85	4	18.75
nM	M100	4	17.39
bE	E85	4	23.84
nC	CNG	4	27.02
nL	LNG	4	21.23
nH	LH2	4	28.62
xJ	Elect	4	5.00

FC	EMI	DESCRIPTION	NOX	CO	CH4	NMOG	PROFILE	CO2	Btu	UNITS	Conversion Factors c = (a/f)*b		
b	11.1	Farm equip 1990 D 101-175hp	11	3.4	0	1.1	9950	700	9350	g/hp-hr	9350	Btu/bhp-hr	10000
b	11.2	Farm equip 2010 D CA	7	3.4	0	1.1	9950	700	9350	g/hp-hr	9350	Btu/bhp-hr	10000
b	12.1	Farm equip 1990 D vapor	0	0	0	0.05	760		0.38	g/gal	42.55	Btu/g	
b	13.1	Farm equip 1990 G 40-100hp	3	235	0	8.25	9951	758	11200	g/hp-hr	11200	Btu/bhp-hr	10000
b	13.2	Farm equip 2010 Gasoline	3	235	0	6.6	9974	758	11200	g/hp-hr	11200	Btu/bhp-hr	10000
b	14.1	Farm equip 1990 Gasol vapor	0	0	0	12.2	9995			g/gal	45.75	Btu/g	
b	14.2	Farm equip 2010 Gasol vapor	0	0	0	10.4	9795		85	g/gal	44.75	Btu/g	
b	21.1	Biomass Truck trans 1990	23.5	11.0	0	1.7	9950	2000	27936	g/mile	5	mi/gal	139,680
b	21.2	Biomass Truck trans 2010	9.4	11.0	0	1.7	9950	2000	27936	g/mile	5	mi/gal	139,680
bE	31.1	Biomass Enzyme Hydrolysis a	7.72	1.28	0.02	0.04	1084			g/gal			
bE	36.2	Corn Fermentation-loeffi	10.9	1.8	0.03	0.06	1185			g/gal			
bM	32.1	IGT vent	0	0	0	0	1070			g/gal-meoh	21.6	Btu/g	
bM	32.2	Shell vent	0	0	0	0	1070			g/gal-meoh	21.6	Btu/g	
bM	35.1	IGT - PGC	0.76	0.26	0.02	0.02	1071			g/gal-meoh			
bM	35.2	Shell - PGC	0.12	0.04	0.003	0.003	1071			g/gal-meoh			
bM	37.1	IGT gasification, methanol	0.001	0.33	0.333	0.01	8100	0	0	g/gal	21.6	Btu/g	
bM	37.2	Adv. gasification, methanol	0.05	0.33	0.333	0.01	8100	700	25000	g/gal			
c	11.1	COAL MINING (UNDER&SURFACE)	0	0	9.5	0	1012			KG/METRICTON			
c	12.1	COAL CLEANING (DRYERS)	0.07	0	0	0.05	535			KG/METRICTON			
c	21.1	TRUCK HAULERS	8	9.9	0	2.1	9950			g/mi			
c	22.1	BARGE/SHIP	7.63	0.872	0	0.206	9950			g/L	39158	btu/l-resid	4885
c	23.1	Rail Diesel 1990	11.3	1.3	0	0.8	9950	687	9167	g/hp-hr	0.0872	hp-hr/ton-mi	1
c	23.2	RAIL Diesel 2010	7	1.3	0	0.8	9950	687	9200	g/hp-hr	0.0872	hp-hr/ton-mi	1
c	23.3	RAIL LNG 2010	3	1.3	0.6	0.2	9950	516	9723	g/hp-hr	0.0872	hp-hr/ton-mi	1
c	32.1	Shell - vent exhaust	0	0	0	0	1070			g/gal-meoh	21.6	Btu/g	
c	32.2	Texaco - vent exhaust	0	0	0	0	1070			g/gal-meoh	21.6	Btu/g	
c	32.3	Normal - vent exhaust	0	12.2	4.1	0	1070			g/gal-meoh	21.6	Btu/g	
c	33.1	Shell - PurgeGasComb	0.14	0.05	0.01	0.01	1070			g/gal-meoh			
c	33.2	Texaco - PGC	0	0	0	0	1071			g/gal-meoh	21.6	Btu/g	
c	33.3	Normal - PGC	1.1	0.36	0.03	0.03	1071			g/gal-meoh			
c	39.1	Coal production composite	0.14	0.05	0.01	0.01	1071			g/gal-meoh			
C	73.1	Distribution leaks	0	0	4.5864	0.4536	9993			g/100scf	49.6	Btu/g	
C	82.1	Local fugitives	0	0	0.1995	0.0105	9993			g/100scf	49.6	Btu/g	
C	82.4	Vehicle refill-leak CNG	0	0	0.0774	0.0076	9993			g/gal	49.6	Btu/g	
D	39.2	Sum of D prod. SC 2010	0.199	0.157	0.2	0.507	321	547	9483	g/gal			
D	39.4	Diesel prod. non SC	0.433	0.026	0.116	1.14	321	87	1416	g/gal			
D	41.3	Fltng roof tanks	0	0	0	0.04	760			g/gal	42.55	Btu/g	
D	51.2	Gasoline transfer - vapor	0	0	0	0	760			g/gal	42.55	Btu/g	

			FC	EMI	NOx	CO	CH4	NMOG	CO2	Btu	lb CO2/M	Notes
	1.070	hp-hr/10,000 Btu	b	11.1	11.76	3.64	0	1.18	749	10000	159	g/10000 Btu
	1.069518717	hp-hr/10,000 Btu	b	11.2	7.487	3.636	0	1.18	749	10000	159	g/10000 Btu
	0.071581961	gal/10000Btu	b	12.1	0	0	0	0.0036	0.0	0.15	159	g/1000Btu
	0.892857143	ton/gal product	b	13.1	2.67857	209.821	0	7.366071	677	10000	149	g/10000 Btu
	0.892857143	ton/gal product	b	13.2	2.67857	209.821	0	5.892857	677	10000	149	g/10000 Btu
	0.0803	gal/10000Btu	b	14.1	0	0	0	0.9791	3.2	44.80	159	g/10000 Btu
	0.0820	gal/10000Btu	b	14.2	0	0	0	0.8525	2.8	38.15	159	g/10000 Btu
Btu/gal	0.35796	gal/Btu*mpg*1e6	b	21.1	8.41208	3.93757	0	0.6085	715.9	10000	159	g/10000 Btu
Btu/gal	0.35796	gal/Btu*mpg*1e5	b	21.2	3.36483	3.93757	0	0.6085	715.9	10000	159	g/10000 Btu
	1	direct	bE	31.1	7.72	1.28	0.02	0.04				
	1	direct	bE	36.2	10.9	1.8	0.03	0.06				
	1	g/gal-meoh	bM	32.1	0	0	0	0	0.0	0	140	
	1	g/gal-meoh	bM	32.2	0	0	0	0	0.0	0	140	
	1	g/gal-meoh	bM	35.1	0.76	0.26	0.02	0.02			0	
	1	g/gal-meoh	bM	35.2	0.12	0.04	0.003	0.003			0	
	1	direct	bM	37.1	0.001	0.33	0.333	0.000001	0	0	0	Methanol Table
	1	direct	bM	37.2	0.05	0.33	0.333	0.000001	0.07	2.5	0	Methanol Table
	0.054094666	(g/gal)/(kg/MT) "C"	c	11.1	0	0	0.5139	0	0.0	0	120	Speciate
	0.054094666	(g/gal)/(kg/MT) "C"	c	12.1	0.00379	0	0	0.002705				Speciate
	0.025641026	mi/gal	c	21.1	0.20513	0.25385	0	0.053846				EMFAC
btu/galmeoh	0.12475	l-resid./galmeoh	c	22.1	0.95185	0.10878	0	0.025699				AP-42
mi	0.0872	hp-hr/1000 ton-mi	c	23.1	0.98536	0.11336	0	0.06976				g/ton-mi
mi	0.0872	hp-hr/1000 ton-mi	c	23.2	0.6104	0.11336	0	0.06976				g/ton-mi
mi	0.0872	hp-hr/1000 ton-mi	c	23.3	0.2616	0.11336	0.05232	0.01744	45.0	847.8		g/ton-mi
	1	g/gal-meoh	c	32.1	0	0	0	0	0.0	0	140	
	1	g/gal-meoh	c	32.2	0	0	0	0	0.0	0	140	
	1	g/gal-meoh	c	32.3	0	12.2	4.1	0	5.6	88.56	140	
	1	g/gal-meoh	c	33.1	0.14	0.05	0.01	0.01				
	1	g/gal-meoh	c	33.2	0	0	0	0	0.0	0	140	
	1	g/gal-meoh	c	33.3	1.1	0.36	0.03	0.03				
	1	g/gal-meoh	c	39.1	0.14	0.05	0.01	0.01				
	1	direct	C	73.1	0	0	4.5864	0.4536	13.6	250.0	120	
	1	direct	C	82.1	0	0	0.1995	0.0105	0.6	10.416	120	Table 5-44
	1	direct	C	82.4	0	0	0.0774	0.0076	0.2	4.22	120	Table 5-39
	1	direct	D	39.2	0.199	0.157	0.2	0.507	547	9483		UPDATE PROFILE w comp
	1	direct	D	39.4	0.433	0.026	0.116	1.14	87	1416		UPDATE PROFILE w comp
	1	direct	D	41.3	0	0	0	0.0400	0.1	1.7	165	Section 5.3
	1	direct	D	51.2	0	0	0	0.0000	0.0	0	165	SCAQMD 1990 inventory

FC	EMI	DESCRIPTION	NOx	CO	CH4	NMOG	PROFILE	CO2	Btu	UNITS	Conversion Factors c = (a/f)*b		
E	51.1	Tanker ship	70	1	0	4	561	3300	40352	g/kg fuel	0.0018	kg/ton mi	288
E	51.3	Port emissions	37	13.9	0	6.9	561	3200	42560	g/kg fuel	0.0514	kg/DWT	288
E	53.1	Rail Transport of Raw ethan	7	1.3	0	0.8	9950	687	9200	g/bhp-hr	87.2	hp-hr/ton-mi	300
G	31.1	Refinery combustion	0.2887			0.1192	3			g/gal gasoline			
G	31.2	Refinery total energy	0	0	0	0	316			g/gal gaso	44.75	Btu/g	
G	31.3	Refinery flares	0.0307	0.3113	0.0366	0.0349	51			g/gal gasoline			
G	32.2	Refinery FCC & boilers	0.0321			0.0019	29			g/gal gasoline			
G	33.1	Refinery valves	0	0	0.5628	0.536	316			g/gal gaso	44.75	Btu/g	
G	33.2	Refinery oil/water sep	0	0	0	0.0903	532			g/gal gaso	44.75	Btu/g	
G	33.3	Refinery sewer & drains	0	0	0	0.1802	532			g/gal gaso	44.75	Btu/g	
G	33.4	Refinery pumps & compressor	0	0	0	0.1192	530			g/gal gaso	44.75	Btu/g	
G	34.2	Refinery vacuum systems	0	0	0	0.0037	35			g/gal gaso	44.75	Btu/g	
G	35.1	Fixed roof tnk crude	0	0	0	0.1099	297			g/gal gaso	44.75	Btu/g	
G	37.1	Refinery natural gas	0	0	0	0	8203			g/kWh	10000	Btu/kWh	
G	38.1	Refinery methanol	0	0	0	0	8200			g/kWh	10000	Btu/kWh	
G	39.1	Refinery Composite	0.0307	0.3113	0.0366	0.0349	51			g/gal gasoline			
G	41.3	Fltng roof tanks	0	0	0	0.19	9994			g/gal	44.75	Btu/g	
G	51.2	Gasoline transfer - vapor	0	0	0	0	9994			g/gal	44.75	Btu/g	
H	31.1	N.G.-H2 reformer purge gas	2.4	0.84	0.07	0.07	3			g/lb-H2			
H	32.3	Biomass gasifier, H2	0.001	0.84	0.07	0.07	8100			g/lb-H2			
H	33.1	N.G.-H2 reformer vent & fug	0	0	0.04	0.04	8103			g/lb-H2		btu/hp-hr	
H	41.1	No site storage					2000						
H	41.6	Liquefaction - recip on N.G	2	2.65	4.42	0.45	1001			g/bhp-hr	8500		1833
H	51.1	No site storage					2000						
J	31.3	Coal Boiler	2.961	0.139	0.0069	0.0162	1185			g/kWH			
J	31.4	Fuel Oil Boiler	1.574	0.157	0.0088	0.0738	504			g/kWH			
J	41.1	ZEV					2000						
J	51.1	ZEV					2000				Heat Rate (not HHV)		Process Energy
L	41.1	Storage of LNG at plant	0	0	1	0	9992			g/gal	50.93	Btu/g	
L	51.1	Tanker ship	70	1	0	4	561	3300	40352	g/kg fuel	0.0018	kg/ton mi	400
L	51.3	Port emissions	37	13.9	0	6.9	561	3200	42560	g/kg fuel	0.0514	kg/DWT	400
L	53.1	Transport of LNG to Bulk St	0	0	0	0	9992			g/gal	50.93	Btu/g	
M	41.3	Floating roof tanks, M100	0	0	0	0.0063	9990			g/gal	21.6	Btu/g	
M	51.1	Tanker ship	70	1	0	4	561	3300	40352	g/kg fuel	0.0018	kg/ton mi	288
M	51.3	Port emissions	37	13.9	0	6.9	561	3200	42560	g/kg fuel	0.0514	kg/DWT	288
M	53.1	Rail transport	43	9.4	0	1.29	561	2933	39154	g/liter re	0.00069	l/d/gal prod	5
n	11.2	PRODUCTION	0	0	0.2639	0.0261	1012		14.4	g/100scf	49.6	Btu/g	
n	23.1	Gathering, reservoir pressure					1012						
n	31.1	Processing	0	0	2.7755	0.2745	1012		151.2	g/100scf	49.6	Btu/g	
n	39.1	NG production SC 1990	0.0014	0.0082	0.33	0.106	1012	3.3	60.0	g/100scf			
n	39.2	NG production SC 2010	0.0014	0.009	0.33	0.032	1012	3.3	60.0	g/100scf			
n	39.4	NG production non SC	0.176	0.23	10.9	1.08	1012	99.6	1690.0	g/100scf			
n	41.1	storage	0	0	0	0	9993			G/SCF	49.6	Btu/g	
n	51.1	NG Recip SC - 1993	2.0	2.65	4.42	0.45	1001	463	8000	g/bhp-hr	0.9	hp-h/MMscf/mi	1000
n	51.2	NG Recip SC - 2010	0.4	3.00	5.00	0.5	1001	463	8000	g/bhp-hr	0.9	hp-h/MMscf/mi	1000
n	51.3	NG Recip CA -1993	6.0	2.65	4.42	0.45	1001	463	8000	g/bhp-hr	0.9	hp-h/MMscf/mi	1000
n	51.4	NG Recip CA -2010	2.0	3.00	5.00	0.5	1001	463	8000	g/bhp-hr	0.9	hp-h/MMscf/mi	1000
n	52.1	NG GT SC - 1993	0.4	0.83	0.17	0.01	3	599	11000	g/bhp-hr	0.9	hp-h/MMscf/mi	1000
n	52.2	NG GT SC - 2010	0.17	1.0	0.2	0.01	3	599	11000	g/bhp-hr	0.9	hp-h/MMscf/mi	1000
n	52.3	NG GT CA - 1993	1.7	0.83	0.17	0.01	3	599	11000	g/bhp-hr	0.9	hp-h/MMscf/mi	1000

			FC	EMI	NOx	CO	CH4	NMOG	CO2	Btu	lb CO2/M	Notes
gal MeoH/DWT	0.006250	1000 mi DWT/gal/kg	E	51.1	0.4375	0.00625	0	0.0250	20.6	252.2	181	g/gal/1000 naut miles
gal	0.000179	kg diesel/gal produ	E	51.3	0.0066	0.00248	0	0.0012	0.6	7.6	181	g/gal for one port
gal/ton	0.290666667	bhp-hr/gal/1000mi	E	53.1	2.03467	0.37787	0	0.232533	199.7	2674.1	165	g/gal/1000mi
	1	direct	G	31.1	0.2887	0	0	0.1192				SCAQMD 1990 inventory
	1	direct	G	31.2	0	0	0	0.0000	1110.3	19257	127	SCAQMD 1990 inventory
	1	direct	G	31.3	0.0307	0.31129	0.03665	0.0349				SCAQMD 1990 inventory
	1	direct	G	32.2	0.0321	0	0	0.0019	0.0	0.0	140	SCAQMD 1990 inventory
	1	direct	G	33.1	0	0	0.5628	0.5360	3.1	49.2	140	SCAQMD 1990 inventory
	1	direct	G	33.2	0	0	0	0.0903	0.3	4.0	140	SCAQMD 1990 inventory
	1	direct	G	33.3	0	0	0	0.1802	0.5	8.1	140	SCAQMD 1990 inventory
	1	direct	G	33.4	0	0	0	0.1192	0.33904	5.3	140	SCAQMD 1990 inventory
	1	direct	G	34.2	0	0	0	0.0037	0.0	0.2	140	SCAQMD 1990 inventory
	1	direct	G	35.1	0	0	0	0.1099	0.3	4.9	140	SCAQMD 1990 inventory
	0.25	kWh/gal	G	37.1	0	0	0	0.0000				
	0.25	kWh/gal	G	38.1	0	0	0	0.0000				
	1	direct	G	39.1	0.0307	0.31129	0.03665	0.0349				SCAQMD 1990 inventory
	1	direct	G	41.3	0	0	0	0.1900	0.6	8.5	149	Section 5.3
	1	direct	G	51.2	0	0	0	0.0000	0.0	0	149	SCAQMD 1990 inventory
	1	direct	H	31.1	2.4	0.84	0.07	0.07				
	1	direct	H	32.3	0.001	0.84	0.07	0.07				
	1	direct	H	33.1	0	0	0.04	0.04				
			H	41.1								
btu/lb-H2	0.215647059	hp-hr/lb-H2	H	41.6	0.43129	0.57146	0.95316	0.097041				
			H	51.1								
	1	direct	J	31.3	2.961	0.139	0.0069	0.0162				
	1	direct	J	31.4	1.574	0.157	0.0088	0.0738				
			J									
sed	Conversion Factor		J		Data in units of g/gal end-use							
	1	direct	L	41.1	0	0	1	0	2.8	50.93	120	Table in report
gal MeoH/DWT	0.004500	1000 mi DWT/gal/kg	L	51.1	0.315	0.0045	0	0.0180	14.9	181.6	181	g/gal/1000 naut miles
gal	0.000129	kg diesel/gal produ	L	51.3	0.0048	0.00179	0	0.0009	0.4	5.5	181	g/gal for one port
	1	direct	L	53.1	0	0	0	0	0.0	0	120	Table in report
	1	direct	M	41.3	0	0	0	0.0063	0.0	0.1	141	Section 5.3
gal MeoH/DWT	0.006250	1000 mi DWT/gal/kg	M	51.1	0.4375	0.00625	0	0.0250	20.6	252.2	181	g/gal/1000 naut miles
gal	0.000179	kg diesel/gal produ	M	51.3	0.0066	0.00248	0	0.0012	0.6	7.6	181	g/gal for one port
days	0.00345	l resid/gal product	M	53.1	0.1484	0.03243	0	0.0045	10.1	135.1	181	Fix this, for trains
	1	direct	n	11.2	0	0	0.2639	0.0261	0.8	14.4	120	GRI
	1	direct	n	31.1	0	0	2.7755	0.2745	8.2	151.28	120	GRI
	1	direct	n	39.1	0.0014	0.00824	0.33	0.106	3.3	60.00	120	Phase 1-5 from RESULTS, Sc1
	1	direct	n	39.2	0.0014	0.009	0.33	0.032	3.3	60.00	120	Phase 1-5 from RESULTS, Sc3
	1	direct	n	39.4	0.176	0.23	10.9	1.08	92.1	1,690	120	Phase 1-5 from RESULTS, Sc3
	1	direct	n	41.1	0	0	0	0	0.0	0	120	
mi	9.00E-02	100scf/MMscf/hp-hr	n	51.1	0.18	0.2385	0.3978	0.0405	41.67	720		per 1000 miles pipeline/100s
mi	1.00E-04	100scf/MMscf	n	51.2	0.0396	0.27	0.45	0.045	41.67	720		per 1000 miles pipeline/100s
mi	1.00E-04	100scf/MMscf	n	51.3	0.54	0.2385	0.3978	0.0405	41.67	720		per 1000 miles pipeline/100s
mi	1.00E-04	100scf/MMscf	n	51.4	0.18	0.27	0.45	0.045	41.67	720		per 1000 miles pipeline/100s
mi	1.00E-04	100scf/MMscf	n	52.1	0.036	0.0747	0.0153	0.0009	53.91	990		per 1000 miles pipeline/100s
mi	1.00E-04	100scf/MMscf	n	52.2	0.0153	0.09	0.018	0.0009	53.91	990		per 1000 miles pipeline/100s
mi	1.00E-04	100scf/MMscf	n	52.3	0.153	0.0747	0.0153	0.0009	53.91	990		per 1000 miles pipeline/100s

FC	EMI	DESCRIPTION	NOx	CO	CH4	NMOG	PROFILE	CO2	Btu	UNITS	Conversion Factors c = (a/f)*b		
n	52.4	NG GT CA - 2010	1.0	1.0	0.2	0.01	3	599	11000	g/bhp-hr	0.9	hp-h/MMscf/mi	1000
n	53.1	Transmission	0	0	7.8897	0.7803	9993		429.7	g/100scf	49.6	Btu/g	
nM	32.2	Steam Reform - Advanced	1.36	0.46	0.04	0.04	8103	1023	30060	g/gal			
nM	32.3	Combined Part. Oxid. - Refo	0	0.09	0.01	0.01	8103	737	24820	g/gal			
nM	33.1	Distillation Vent	0	0	0	1.2	1071		59.5	g/gal			
nM	34.1	Purge Vent	0	0	3	0.5	1070		173.5	g/gal			
nM	35.1	Fugitive emissions	0	0	3	0.5	1070		173.5	g/gal			
nM	39.1	Avg M100 prod. 1990 SC	0.02	0.0027	0	0.002	9990	1.2	15.0	g/gal			
nM	39.2	Avg M100 prod. 2010 SC	0.02	0.0027	0	0.002	9990	1.2	15.0	g/gal			
nM	39.4	Avg M100 production ROW	4.04	0.33	0.33	2.07	9990	922	21498.0	g/gal			
b	39.4	Avg biomass production	0.07	0.0515	0.135	0.08	9990	26.5	410.0	g/10000Btu			
o	11.1	Oil prod. fuel combustion	0.0559			0.0452	504			g/gal gaso	250	Btu/gal	
o	11.2	TEOR steam generators	0.0028			0	504			g/gal gaso	25	Btu/gal	
o	12.1	Pumps and compressors	0	0		0.013	531			g/gal gaso	41.83	Btu/g	
o	12.2	Sumps and pits	0	0		0.0093	532			g/gal gaso	41.83	Btu/g	
o	13.1	Marine vessel crude	0	0	0	0.10665	305			g/gal gaso	41.83	Btu/g	
o	13.2	Marine vessel gasoline	0	0	0	0.10665	710			g/gal gaso	41.83	Btu/g	
o	14.1	Oil field storage	0	0	0	0.2133	529			g/gal gaso	41.83	Btu/g	
o	15.2	DRILLING CRUDE EXTRACTION 1	12	2.65	4.42	0.45	1001			g/hp-hr	8500	btu/hp-hr	331.4
o	15.3	DRILLING CRUDE EXTRACTION -	0	0	0	0.1855	1207			g/bbl-crude			
o	16.1	COMPLETE WELL FUGITIVE EMIS	0	0	0	0.684	1207			g/bbl-crude			
o	21.3	Port emissions	37	13.9	0	6.9	561	3200	42560	g/kg fuel	0.0514	kg/DWT	246.8
o	21.4	Tanker ship	70	1	0	4	561	3300	40352	g/kg fuel	0.0018	kg/ton mi	247
o	26.1	LOADING, IN-TRANSIT, BALSTN	0	0	0	1	305			g/bbl-crude			
o	27.1	Oil pipelines	0	0	0	0	1011			negligble			
P	31.1	Sweetner plant	0	0	0	0	9991		300	g/gal	47.84	Btu/g	
P	41.1	On-site storage of LPG	0	0	0	0	9991			g/gal	47.84	Btu/g	
P	51.1	Transport of LPG to Bulk	0	0	0	0	9991			g/gal	47.84	Btu/g	
R	39.1	Sum of RFG prod. SC 1990	0.315	0.23	0.47	1.27	321	794	13754	g/gal			
R	39.2	Sum of RFG prod. SC 2010	0.36	0.08	0.31	0.636	321	838	14862	g/gal			
R	39.4	RFG prod. non SC	0.981	0.05	0.15	2.67	321	178	2861	g/gal			
R	41.3	Floating roof tanks, RFG	0	0	0	0.17	9794			g/gal	44.75	Btu/g	
R	51.2	Gasoline transfer - vapor	0	0	0	0	9794			g/gal	44.75	Btu/g	
R	59.1	Gasoline transfer - vapor	0	0	0	0	9794			g/gal	44.75	Btu/g	
D	61.3	Bulk sotrage working loss	0	0	0	0.0036	760			g/gal	42.55	Btu/g	
D	61.4	Bulk storage breathing	0	0	0	0	760			g/gal	42.55	Btu/g	
E	61.1	Bulk strg loss E100	0	0	0	0.0041	9989			g/gal	28.22	Btu/g	
E	61.3	Bulk strg work. loss E85	0	0	0	0.0254	9878			g/gal	30.76	Btu/g	
G	61.3	Bulk sotrage working loss	0	0	0	0.0383	9994			g/gal	44.75	Btu/g	
G	61.4	Bulk storage breathing	0	0	0	0	9994			g/gal	44.75	Btu/g	
H	61.1	No site storage					2000					mi	
J	61.1	ZEV					2000			[a]	[f]		[b]
L	61.1	Storage of LNG at Bulk	0	0	8.87	1.13	9992			g/gal	50.93	Btu/g	
M	61.1	use 61.3	0	0	0	0.0061	9990			g/gal	21.6	Btu/g	
M	61.3	Bulk strg work loss M100	0	0	0	0.0063	9990			g/gal	21.6	Btu/g	
M	61.4	Bulk storage breathing	0	0	0	0	9990			g/gal	21.6	Btu/g	
n	61.1	Storage	0	0	0.364	0.036	9993		19.8	g/100scf	49.6	Btu/g	
N	61.3	Bulk strg work loss M85	0	0	0	0.0213	9978			g/gal	24.45	Btu/g	
N	61.4	Bulk storage breathing	0	0	0	0	9990			g/gal	21.6	Btu/g	
P	61.1	Bulk Storgage of LPG	0	0	0	0	9991			g/gal	47.84	Btu/g	

			FC	EMi	NOx	CO	CH4	NMOG	CO2	Btu	lb CO2/M	Notes
mi	1.00E-04	100scf/MMscf	n	52.4	0.09	0.09	0.018	0.0009	53.91	990		per 1000 miles pipeline/100s
	1	direct	n	53.1	0	0	7.8897	0.7803	23.4	430.032	120	GRI
	1	direct	nM	32.2	1.36	0.46	0.04	0.04	0.1023	3.006		Methanol Table
	1	direct	nM	32.3	0	0.09	0.01	0.01	0.0737	2.482		Methanol Table
	1	direct	nM	33.1	0	0	0	1.2	3.8	59.47	140	Methanol Table
	1	direct	nM	34.1	0	0	3	0.5	9.5	173.46	120	Methanol Table
	1	direct	nM	35.1	0	0	3	0.5	9.5	173.46	120	Methanol Table
	1	direct	nM	39.1	0.02	0.0027	0	0.002	0.8	15.00	120	Phases 1-5 in RESULTS, Sc1
	1	direct	nM	39.2	0.02	0.0027	0	0.002	0.8	15.00	120	Phases 1-5 in RESULTS, Sc3
	1	direct	nM	39.4	4.04	0.33	0.33	2.07	1171.2	21,498	120	Phases 1-5 in RESULTS, Sc3
	1	direct	b	39.4	0.07	0.0515	0.135	0.08	22.3	410	120	g/10000 Btu Biomass
	1	direct	o	11.1	0.0559	0	0	0.0452	15.9	250	140	SCAQMD 1990 inventory
	1	direct	o	11.2	0.0028	0	0	0	1.6	25	140	SCAQMD 1990 inventory
	1	direct	o	12.1	0	0	0	0.013	0.03456	0.54379	140	SCAQMD 1990 inventory
	1	direct	o	12.2	0	0	0	0.0093	0.02473	0.389019	140	SCAQMD 1990 inventory
	1	direct	o	13.1	0	0	0	0.1067	0.3	4.4611695	140	SCAQMD 1990 inventory
	1	direct	o	13.2	0	0	0	0.1067	0.3	4.5	140	SCAQMD 1990 inventory
	1	direct	o	14.1	0	0	0	0.2133	0.567	8.92	140	SCAQMD 1990 inventory
btu needed/ga	0.0390	bhp-hr/gal	o	15.2	0.46786	0.10332	0.17233	0.0175				GRI-sid
	0.0252	bbl-crude/gal (refi	o	15.3	0	0	0	0.0047				ORNL
	0.0252	bbl-crude/gal (refi	o	16.1	0	0	0	0.0172	0.0	0.0	140	speciate - kind of high/low?
gal crude/DWT	0.00021	kg diesel/gal produ	o	21.3	0.00771	0.0029	0	0.0014	0.7	8.9	181	Table 5- ship opeartions
gal crude/DWT	0.00729	kg*1000 mi/DWT/gal	o	21.4	0.51012	0.00729	0	0.0291	24.0	294.1	181	g/1000 naut miles/gal crude
	0.0252	bbl-crude/gal (refi	o	26.1	0	0	0	0.0252				ORNL
	1	direct	o	27.1	0	0	0	0.0000				Sid
	1	direct	P	31.1	0	0	0	0.0000	0.0	0.00	138	Table 6-X
	1	direct	P	41.1	0	0	0	0.0000	0.0	0.00	138	Table 6-X
	1	direct	P	51.1	0	0	0	0.0000	0.0	0.00	138	Table 6-X
	1	direct	R	39.1	0.315	0.23	0.47	1.27	794	13754		UPDATE PROFILE w comp
	1	direct	R	39.2	0.36	0.08	0.31	0.636	838	14862		UPDATE PROFILE w comp
	1	direct	R	39.4	0.981	0.05	0.15	2.67	178	2861		UPDATE PROFILE w comp
	1	direct	R	41.3	0	0	0	0.1700	0.5	7.6	149	Section 5.3
	1	direct	R	51.2	0	0	0	0.0000	0.0	0	149	SCAQMD 1990 inventory
	1	direct	R	59.1	0	0	0	0.0000	0.0	0	149	SCAQMD 1990 inventory
	1	direct	D	61.3	0	0	0	0.0036	0.0	0.15318	165	Table 5-40
	1	direct	D	61.4	0	0	0	0.0000	0.0	0	165	Table 5-40
	1	direct	E	61.1	0	0	0	0.0041	0.0	0.1	0	SCAQMD 1990 inventory
	1	direct	E	61.3	0	0	0	0.0254	0.0	0.8	22	Table 5-40
	1	direct	G	61.3	0	0	0	0.0383	0.1	1.714	149	Table 5-40
	1	direct	G	61.4	0	0	0	0.0000	0.0	0	149	Table 5-40
			H	61.1								
	[c/a=b/f]		J									
	1	direct	L	61.1	0	0	8.87	1.13			120	Table in report
	1	direct	M	61.1	0	0	0	0.0061	0.0	0.13176	140	SCAQMD 1990 inventory
	1	direct	M	61.3	0	0	0	0.0063	0.0	0.13608	141	Table 5-40
	1	direct	M	61.4	0	0	0	0.0000	0.0	0	141	Table 5-40
	1	direct	n	61.1	0	0	0.364	0.036	1.1	19.84	120	Thomason
	1	direct	N	61.3	0	0	0	0.0213	0.0	0.520785	141	Table 5-40
	1	direct	N	61.4	0	0	0	0.0000	0.0	0	141	Table 5-40
	1	direct	P	61.1	0	0	0	0.0000	0.0	0.00	138	Table 6-X

FC	EMI	DESCRIPTION	NOx	CO	CH4	NMOG	PROFILE	CO2	Btu	UNITS	Conversion Factors c = (a/f)*b		
R	61.3	Bulk sotrage working loss	0	0	0	0.0301	9794			g/gal	44.75	Btu/g	
R	61.4	Bulk storage breathing	0	0	0	0	9794			g/gal	44.75	Btu/g	
R	69.1	Bulk strg working loss RFG	0	0	0	0.0061	9794			g/gal	44.75	Btu/g	
J	71.1	ZEV					2000				(Btu/unit)		(Btu/gal-eu
D	71.2	Tank truck working loss	0	0	0	0.0002	760			g/gal	42.55	Btu/g	
D	72.1	Tank truck load spills	0	0	0	0.01	9982			g/gal	42.55	Btu/g	
D	74.1	Truck unloading spills	0	0	0	0.0105	9982			g/gal	42.55	Btu/g	
E	71.2	Tank truck working loss E84	0	0	0	0.0394	9878			g/gal	30.76	Btu/g	
E	71.8	Tank truck working loss E10	0	0	0	0.007	9989			g/gal	28.22	Btu/g	
E	72.1	Tank truck load spills E85	0	0	0	0.0095	9880			g/gal	30.76	mi	
E	72.8	Tank truck load spills E100	0	0	0	0.0095	9880			g/gal	28.22	mi	
E	74.1	Truck unloading spills E84	0	0	0	0.0095	9880			g/gal	30.76	Btu/g	
E	74.8	Truck unloading spills E100	0	0	0	0.0095	9989			g/gal	28.22	Btu/g	
G	71.2	Tank truck working loss	0	0	0	0.0566	9994			g/gal	44.75	Btu/g	
G	72.1	Tank truck load spills	0	0	0	0.0088	9996			g/gal	44.75	Btu/g	
G	74.1	Truck unloading spills	0	0	0	0.0088	9996			g/gal	44.75	Btu/g	
L	72.1	Truck fill hose disconnect	0	0	0.04272	0.00528	9992			g/gal	50.93	Btu/g	
L	72.7	Truck venting, 2 atm	0	0	5.1175	0.6325	9992			g/gal	50.93	Btu/g	
L	74.1	Truck unloading hose loss	0	0	0.0006	0.0001	9992			g/gal	50.93	Btu/g	
M	71.2	Tank truck working loss M10	0	0	0	0.0105	9990			g/gal	21.6	Btu/g	
M	72.1	Tank truck load spills M100	0	0	0	0.0095	9990			g/gal	21.6	Btu/g	
M	74.1	Truck unloading spills M100	0	0	0	0.0095	9990			g/gal	21.6	Btu/g	
N	71.2	Tank truck working loss M87	0	0	0	0.035	9978			g/gal	24.45	Btu/g	
N	72.1	Tank truck load spills M87	0	0	0	0.0095	9980			g/gal	24.45	Btu/g	
N	74.1	Truck unloading spills M87	0	0	0	0.0095	9980			g/gal	24.45	Btu/g	
P	72.1	Truck fill hose disconnect	0	0	0	0.07	9991			g/gal	47.84	Btu/g	
P	72.7	Truck outage loss	0	0	0	2	9991			g/gal	47.84	Btu/g	
P	74.1	Truck unloading hose loss	0	0	0	0.0008	9991			g/gal	47.84	Btu/g	
R	71.2	Tank truck working loss	0	0	0	0.0494	9794			g/gal	44.75	Btu/g	
R	72.1	Tank truck load spills	0	0	0	0.0088	9796			g/gal	44.75	Btu/g	
R	74.1	Truck unloading spills	0	0	0	0.0088	9796			g/gal	44.75	Btu/g	
D	73.2	Truck exhaust 2010	9.4	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	7080
E	73.2	Truck exhaust 2010	9.4	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	7800
G	73.2	Truck exhaust 2010	9.4	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	8500
H	73.2	Truck exhaust 2010	9.4	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	12000
L	73.2	Truck exhaust 2010	9.4	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	12000
M	73.2	Truck exhaust 2010	9.4	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	7800
N	73.2	Truck exhaust 2010	9.4	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	7800
P	73.2	Truck exhaust 2010	9.4	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	10000
R	73.2	Truck exhaust 2010	9.4	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	8500
D	73.1	Truck exhaust 1992	23.5	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	7080
E	73.1	Truck exhaust 1992	23.5	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	7800
G	73.1	Truck exhaust 1992	23.5	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	8500
H	73.1	Truck exhaust 1992	23.5	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	12000
L	73.1	Truck exhaust 1992	23.5	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	12000
M	73.1	Truck exhaust 1992	23.5	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	7800
N	73.1	Truck exhaust 1992	23.5	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	7800
P	73.1	Truck exhaust 1992	23.5	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	10000
R	73.1	Truck exhaust 1992	23.5	11.0	0	1.7	9950	2000	27936	g/mile	50	mi	8500
J	81.1	ZEV					2000						

			FC	EMI	NOx	CO	CH4	NMOG	CO2	Btu	lb CO2/M	Notes
	1	direct	R	61.3	0	0	0	0.0301	0.1	1.346975	149	Table 5-40
	1	direct	R	61.4	0	0	0	0.0000	0.0	0	149	SCAQMD 1990 inventory
	1	direct	R	69.1	0	0	0	0.0061	0.0	0.272975	149	SCAQMD 1990 inventory
	(unit/gal-eu)		J									
	1	direct	D	71.2	0	0	0	0.0002	0.0	0.00851		SCAQMD 1990 inventory
	1	direct	D	72.1	0	0	0	0.0100	0.0	0.4255		Observation
	1	direct	D	74.1	0	0	0	0.0105	0.0	0.45	165	Table 6-X
	1	direct	E	71.2	0	0	0	0.0394	0.0	1.2	22	SCAQMD 1990 inventory
	1	direct	E	71.8	0	0	0	0.0070	0.0	0.2	0	SCAQMD 1990 inventory
	1	direct	E	72.1	0	0	0	0.0095	0.0	0.3	22	Observation
	1	direct	E	72.8	0	0	0	0.0095	0.0	0.3	0	Observation
	1	direct	E	74.1	0	0	0	0.0095	0.0	0.29222	22	Table 6-X
	1	direct	E	74.8	0	0	0	0.0095	0.0	0.26809	0	Table 6-X
	1	direct	G	71.2	0	0	0	0.0566	0.2	2.5	149	SCAQMD 1990 inventory
	1	direct	G	72.1	0	0	0	0.0088	0.0	0.4	149	Observation
	1	direct	G	74.1	0	0	0	0.0088	0.0	0.39	149	Table 6-X
	1	direct	L	72.1	0	0	0.04272	0.00528	0.1	2.44	117	Observation
	1	direct	L	72.7	0	0	5.1175	0.6325	15.6	292.85	117	Table in report
	1	direct	L	74.1	0	0	0.0006	0.0001	0.0	0.04	117	Table in report
	1	direct	M	71.2	0	0	0	0.0105	0.0	0.2268	141	SCAQMD 1990 inventory
	1	direct	M	72.1	0	0	0	0.0095	0.0	0.2052	141	Observation
	1	direct	M	74.1	0	0	0	0.0095	0.0	0.2052	141	Table 6-X
	1	direct	N	71.2	0	0	0	0.0350	0.1	0.85575	141	SCAQMD 1990 inventory
	1	direct	N	72.1	0	0	0	0.0095	0.0	0.232275	141	Observation
	1	direct	N	74.1	0	0	0	0.0095	0.0	0.232275	141	Table 6-X
	1	direct	P	72.1	0	0	0	0.0700	0.2	3.35	138	Table 6-X
	1	direct	P	72.7	0	0	0	2.0000	6.0	95.68	138	Table 6-X
	1	direct	P	74.1	0	0	0	0.0008	0.0	0.04	138	Table 6-X
	1	direct	R	71.2	0	0	0	0.0494	0.1	2.21065	149	SCAQMD 1990 inventory
	1	direct	R	72.1	0	0	0	0.0088	0.0	0.3938	149	Observation
	1	direct	R	74.1	0	0	0	0.0088	0.0	0.3938	149	Table 6-X
gal/trip	0.007062147	mi/gal carried	D	73.2	0.06638	0.07768	0	0.0120	14.1	184		MTA data, 40% NOx
gal/trip	0.006410256	mi/gal carried	E	73.2	0.06026	0.07051	0	0.0109	12.8	167		MTA data, 40% NOx
gal/trip	0.005882353	mi/gal carried	G	73.2	0.05529	0.06471	0	0.0100	11.8	153		MTA data, 40% NOx
gal/trip	0.004166667	mi/gal carried	H	73.2	0.03917	0.04583	0	0.0071	8.3	108		MTA data, 40% NOx
gal/trip	0.004166667	mi/gal carried	L	73.2	0.03917	0.04583	0	0.0071	8.3	108		MTA data, 40% NOx
gal/trip	0.006410256	mi/gal carried	M	73.2	0.06026	0.07051	0	0.0109	12.8	167		MTA data, 40% NOx
gal/trip	0.006410256	mi/gal carried	N	73.2	0.06026	0.07051	0	0.0109	12.8	167		MTA data, 40% NOx
gal/trip	0.005	mi/gal carried	P	73.2	0.047	0.055	0	0.0085	10.0	130		MTA data, 40% NOx
gal/trip	0.005882353	mi/gal carried	R	73.2	0.05529	0.06471	0	0.0100	11.8	153		MTA data, 40% NOx
gal/trip	0.007062147	mi/gal carried	D	73.1	0.16596	0.07768	0	0.0120	14.1	184		MTA data
gal/trip	0.006410256	mi/gal carried	E	73.1	0.15064	0.07051	0	0.0109	12.8	167		MTA data
gal/trip	0.005882353	mi/gal carried	G	73.1	0.13824	0.06471	0	0.0100	11.8	153		MTA data
gal/trip	0.004166667	mi/gal carried	H	73.1	0.09792	0.04583	0	0.0071	8.3	108		MTA data
gal/trip	0.004166667	mi/gal carried	L	73.1	0.09792	0.04583	0	0.0071	8.3	108		MTA data
gal/trip	0.006410256	mi/gal carried	M	73.1	0.15064	0.07051	0	0.0109	12.8	167		MTA data
gal/trip	0.006410256	mi/gal carried	N	73.1	0.15064	0.07051	0	0.0109	12.8	167		MTA data
gal/trip	0.005	mi/gal carried	P	73.1	0.1175	0.055	0	0.0085	10.0	130		MTA data
gal/trip	0.005882353	mi/gal carried	R	73.1	0.13824	0.06471	0	0.0100	11.8	153		MTA data
			J									

FC	EMi	DESCRIPTION	NOx	CO	CH4	NMOG	PROFILE	CO2	Btu	UNITS	Conversion Factors c = (a/f)*b		
D	82.2	Total Station-storage	0	0	0	0.0135	760			g/gal	42.55	Btu/g	
D	82.3	Vehicle refill-vapor	0	0	0	0.0163	760			g/gal	42.55	Btu/g	
D	82.4	Vehicle refill-spill .7	0	0	0	0.38	9982			g/gal	42.55	Btu/g	
E	82.2	Total Station-storage E85	0	0	0	0.1615	9878			g/gal	30.76	Btu/g	
E	82.3	Vehicle refill-vapr E84, 6.	0	0	0	0.3129	9879			g/gal	30.76	Btu/g	
E	82.4	Vehicle refill-spill E84	0	0	0	0.288	9880			g/gal	30.76	btu/hp-hr	
E	82.7	Vehicle refill-vapr E84, 7.	0	0	0	0.35	9879			g/gal	30.76	Btu/g	
G	82.2	Total Station-storage	0	0	0	0.2086	9994			g/gal	44.75	Btu/g	
G	82.3	Vehicle refill-vapor	0	0	0	0.4123	9995			g/gal	44.75	Btu/g	
G	82.4	Vehicle refill-spill .7	0	0	0	0.3175	9996			g/gal	44.75	Btu/g	
L	82.4	Vehicle disconnect	0	0	0.08	0.0102	9992			g/gal	50.93	Btu/g	
M	82.2	Total Station-storage M100	0	0	0	0.0409	9990			g/gal	21.6	Btu/g	
M	82.3	Vehicle refill-vapor M100	0	0	0	0.0849	9990			g/gal	21.6	Btu/g	
M	82.4	Vehicle refill-spill M100	0	0	0	0.211	9990			g/gal	21.6	Btu/g	
N	82.2	Total Station-storage M87	0	0	0	0.1188	9978			g/gal	24.45	Btu/g	
N	82.3	Vehicle refill-vapor M87, 7	0	0	0	0.2379	9979			g/gal	24.45	Btu/g	
N	82.4	Vehicle refill-spill M87	0	0	0	0.288	9980			g/gal	24.45	Btu/g	
P	82.3	see 82.7	0	0	0	0	9991			g/gal	47.84	Btu/g	
P	82.4	Vehicle disconnect, low vol	0	0	0	0.08	9991			g/gal	47.84	Btu/g	
P	82.7	Vehicle outage loss	0	0	0	15	9991			g/gal	47.84	Btu/g	
P	83.7	Storage tank outage	0	0	0	5	9991			g/gal	47.84	Btu/g	
R	82.2	Total Station-storage	0	0	0	0.1824	9794			g/gal	44.75	Btu/g	
R	82.3	Vehicle refill-vapor	0	0	0	0.3588	9795			g/gal	44.75	Btu/g	
R	82.4	Vehicle refill-spill .7	0	0	0	0.3175	9796			g/gal	44.75	Btu/g	
x	11.2	PRODUCTION/PROCESSING	0	0	0.0506	0	1012			G/SCF			
x	11.3	SWEETENING	0	0	0	0	1012			G/SCF		btu/hp-hr	
x	12.1	COAL MINING (UNDER&SURFACE)	0	0	9.5	0	1012			g/kg			
x	12.2	COAL PREP PLANT	70	0	0	0	xx			PPM			
x	12.3	COAL CLEANING (DRYERS)	0.07	0	0	0.05	xx			KG/METRICTON		btu/l-resid	
x	13.1	DRILLING CRUDE EXTRACTION 1	12	2.65	4.42	0.45	1001			g/hp-hr	8500		275
x	13.2	COMPLETE WELL FUGITIVE EMIS	0	0	0	0.684	1207			g/bbl-crude			
x	13.3	STORAGE OF CRUDE IN FIELD	0	0	0	9.25	305			g/bbl-crude			
x	13.4	DRILLING CRUDE EXTRACTION -	0	0	0	0.1855	1207			g/bbl-crude			
x	21.2	pipeline fugitive	0	0	0.089	0	1012			G/SCF		btu/hp-hr	
x	22.1	BARGE/SHIP	7.63	0.872	0	0.206	504			g/L	39158	btu/hp-hr	150
xB	18.1	NG refomer, NH3	0.1	0.0338	0.0029	0.0027	8103	120	1000000	lb/MMBtu	454	g/lb	10000
xB	18.2	Propane burner	0.14	0.034	0.003	0.0027	8105	138	1000000	lb/MMBtu	454	g/lb	10000
xB	32.2	NG reformer , methanol	0.1	0.0338	0.0029	0.0027	8103	120	1000000	lb/MMBtu	454	g/lb	10000
xB	32.3	NG reformer , CA 2010	0.03	0.0338	0.0029	0.0027	3	120	1000000	lb/MMBtu	454	g/lb	10000
xB	35.1	NG boiler, SC 1990	0.08	0.0338	0.0029	0.0027	3	120	1000000	lb/MMBtu	454	g/lb	10000
xB	35.2	NG boiler, SC 2010	0.03	0.0338	0.0029	0.0027	3	120	1000000	lb/MMBtu	454	g/lb	10000
xB	35.3	NG boiler, CA 1990	0.08	0.0338	0.0029	0.0027	3	120	1000000	lb/MMBtu	454	g/lb	10000
xB	35.3	NG boiler, US 2010	0.1	0.0338	0.0029	0.0027	3	120	1000000	lb/MMBtu	454	g/lb	10000
xB	35.4	NG boiler, CA 2010	0.03	0.0338	0.0029	0.0027	3	120	1000000	lb/MMBtu	454	g/lb	10000
xB	36.1	Coal boiler, 2010	0.3	0.0826	0.0012	0.0029	1185	202	1000000	lb/MMBtu	454	g/lb	10000
xB	37.1	Biomass boiler, CA 2010	0.1	0.04	0.003	0.003	1084	0	0	lb/MMBtu	454	g/lb	10000
xB	38.2	Diesel boiler, SC 2010	0.03	0.0363	0.004	0.0015	504	165	1000000	lb/MMBtu	454	g/lb	10000
xJ	19.9	Solar Energy	No emissions		0	0	2000	0	0	g/kWh	0	0	0
xJ	32.1	Average 2000, SC	0.467	0.23	0.05	0.087	3	602	9000	g/kWh			
xJ	32.2	Average 2000, CA	0.233	0.12	0.05	0.055	3	248	9000	g/kWh			

			FC	EMi	NOx	CO	CH4	NMOG	CO2	Btu	lb CO2/M	Notes
	1	direct	D	82.2	0	0	0	0.0135	0.0	0.6	165	Table 5-44
	1	direct	D	82.3	0	0	0	0.0163	0.1	0.7	165	Table 5-44
	1	direct	D	82.4	0	0	0	0.3800	1.2	16.2	165	Table 5-39
	1	direct	E	82.2	0	0	0	0.1615	0.0	4.97	22	Table 5-44
	1	direct	E	82.3	0	0	0	0.3129	0.1	9.62	22	Table 5-44
	1	direct	E	82.4	0	0	0	0.2880	0.1	8.86	22	Table 5-39
	1	direct	E	82.7	0	0	0	0.3500	0.1	10.77	22	Table 5-44
	1	direct	G	82.2	0	0	0	0.2086	0.6	9.3	149	
	1	direct	G	82.3	0	0	0	0.4123	1.2	18.5	149	Table 5-44
	1	direct	G	82.4	0	0	0	0.3175	1.0	14.2	149	Table 5-39
	1	direct	L	82.4	0	0	0.08	0.0102	0.2	4.59	117	Table 5-39
	1	direct	M	82.2	0	0	0	0.0409	0.1	0.88	141	Table 5-44
	1	direct	M	82.3	0	0	0	0.0849	0.1	1.83	141	Table 5-44
	1	direct	M	82.4	0	0	0	0.2110	0.3	4.56	141	Table 5-39
	1	direct	N	82.2	0	0	0	0.1188	0.2	2.90	141	Table 5-44
	1	direct	N	82.3	0	0	0	0.2379	0.4	5.82	141	Table 5-44
	1	direct	N	82.4	0	0	0	0.2880	0.5	7.04	141	Table 5-39
	1	direct	P	82.3	0	0	0	0.0000	0.0	0.00	138	Table 5-44
	1	direct	P	82.4	0	0	0	0.0800	0.2	3.83	138	
	1	direct	P	82.7	0	0	0	15.0000	45.0	717.6	138	
	1	direct	P	83.7	0	0	0	5.0000	15.0	239.20	138	
	1	direct	R	82.2	0	0	0	0.1824	0.6	8.16	149	Table 5-44
	1	direct	R	82.3	0	0	0	0.3588	1.1	16.06	149	Table 5-44
	1	direct	R	82.4	0	0	0	0.3175	1.0	14.21	149	
	7.327536232	SCF/kWH	x	11.2	0	0	0.37077	0				
	7.327536232	SCF/kWH	x	11.3	0	0	0	0				
	0.375206612	(g/kWH)/(kg)	x	12.1	0	0	3.56446	0				
	0	unknown	x	12.2	0	0	0	0				
	0.375206612	(g/kWH)/(kg)	x	12.3	0.02626	0	0	0.01876				
btu needed/ga	0.032352941	bhp-hr/galgas	x	13.1	0.38824	0.08574	0.143	0.014559				
	0.0016657	bbl/kWH	x	13.2	0	0	0	0.001139				
	0.0016657	bbl/kWH	x	13.3	0	0	0	0.015408				
	0.0016657	bbl/kWH	x	13.4	0	0	0	0.000309				
	7.328	SCF/kWH	x	21.2	0	0	0.65215	0				
btu/kWH	0.00383	l-resid./KWH	x	22.1	0.02923	0.00334	0	0.000789				
Btu	4.54	g/lb*100	xB	18.1	0.454	0.15345	0.01317	0.012258	544.8	10000	120	g/10000 Btu
Btu	4.54	g/lb*100	xB	18.2	0.6356	0.15436	0.01362	0.012258	626.52	10000	138	g/10000 Btu
Btu	4.54	g/lb*100	xB	32.2	0.454	0.15345	0.01317	0.012258	544.8	10000	120	g/10000 Btu
Btu	4.54	g/lb*100	xB	32.3	0.1362	0.15345	0.01317	0.012258	544.8	10000	120	g/10000 Btu
Btu	4.54	g/lb*100	xB	35.1	0.3632	0.15345	0.01317	0.012258	544.8	10000	120	g/10000 Btu
Btu	4.54	g/lb*100	xB	35.2	0.1362	0.15345	0.01317	0.012258	544.8	10000	120	g/10000 Btu
Btu	4.54	g/lb*100	xB	35.3	0.3632	0.15345	0.01317	0.012258	544.8	10000	120	g/10000 Btu
Btu	4.54	g/lb*100	xB	35.3	0.454	0.15345	0.01317	0.012258	544.8	10000	120	g/10000 Btu
Btu	4.54	g/lb*100	xB	35.4	0.1362	0.15345	0.01317	0.012258	544.8	10000	120	g/10000 Btu
Btu	4.54	g/lb*100	xB	36.1	1.362	0.375	0.00545	0.013166	917.08	10000	202	g/10000 Btu
Btu	4.54	g/lb*100	xB	37.1	0.454	0.1816	0.01362	0.01362	0	0	0	g/10000 Btu
Btu	4.54	g/lb*100	xB	38.2	0.136	0.165	0.018	0.007	749.1	10000	165	g/10000 Btu
0	0	g/kWh	xJ	19.9	0	0	0	0				
	1	direct	xJ	32.1	0.467	0.23	0.05	0.087	602	9000	147.33	ELFIN
	1	direct	xJ	32.2	0.233	0.12	0.05	0.055	248	9000	60.70	ELFIN

FC	EMi	DESCRIPTION	NOx	CO	CH4	NMOG	PROFILE	CO2	Btu	UNITS	Conversion Factors c = (a/f)*b		
xJ	32.3	Average 2000, US	1.26	0.073	0.01	0.013	3	609	9000	g/kWh			
xJ	32.4	Average 2000, Total	1.2	0.183	0.187	0.208	3	478	9000	g/kWh			
xJ	35.1	Incremental SC 2010, 80/20	0.099	0.087	0.01	0.016	3	490	9000	g/kWh			
xJ	35.2	Incremental CA 2010, 80/20	0.245	0.207	0.05	0.048	3	481	9000	g/kWh			
xJ	35.3	Incremental US 2010, 80/20	1.05	0.021	0.01	0.011	3	484	9000	g/kWh			
xJ	36.1	Incremental SC 2010, 95/5	0.071	0.019	0.02	0.021	3	479	9000	g/kWh			
xJ	36.2	Incremental CA 2010, 95/5	0.354	0.234	0.06	0.062	3	490	9000	g/kWh			
xJ	36.3	Incremental US 2010, 95/5	1.22	0.03	0.01	0.013	3	576	9000	g/kWh			
xJ	39.1	Average 2010, SC	0.337	0.114	0.056	0.062	3	561	9000	g/kWh			
xJ	39.2	Average 2010, CA	0.283	0.105	0.04	0.048	3	248	9000	g/kWh			
xJ	39.3	Average 2010, US	1.71	0.2	0.26	0.3	3	494	9000	g/kWh			
xJ	39.4	Average 2010, Total	1.09	0.17	0.18	0.185	3	453	9000	g/kWh			
xJ	39.5	NG fired electricity, ROW	0.5	0.23	0.2	0.03	3	450	10000	g/kWh			
xJ	79.1	Compression energy 1990 SC	0.08123	0.0423	0.0823	0.0208	3	108	9000	g/kWh			
xJ	79.2	Compression 1990 non SC	1.09	0.17	0.4	0.15	3	453	9000	g/kWh			
xJ	79.3	Compression energy 2010 SC	0.08	0.0453	0.183	0.0167	3	279	9000	g/kWh			
xJ	79.4	Compression 2010 non SC	1.09	0.17	0.4	0.15	3	453	9000	g/kWh			

			FC	EMi	NOx	CO	CH4	NMOG	CO2	Btu	lb CO2/M	Notes
	1	direct	xJ	32.3	1.26	0.073	0.01	0.013	609	9000	149.05	ELFIN
	1	direct	xJ	32.4	1.2	0.183	0.187	0.208	478	9000	116.98	ELFIN
	1	direct	xJ	35.1	0.099	0.087	0.01	0.016	490	9000	119.92	ELFIN
	1	direct	xJ	35.2	0.245	0.207	0.05	0.048	481	9000	117.72	ELFIN
	1	direct	xJ	35.3	1.05	0.021	0.01	0.011	484	9000	118.45	ELFIN
	1	direct	xJ	36.1	0.071	0.019	0.02	0.021	479	9000	117.23	ELFIN
	1	direct	xJ	36.2	0.354	0.234	0.06	0.062	490	9000	119.92	ELFIN
	1	direct	xJ	36.3	1.22	0.03	0.01	0.013	576	9000	140.97	ELFIN
	1	direct	xJ	39.1	0.337	0.114	0.056	0.062	561	9000	137.30	ELFIN
	1	direct	xJ	39.2	0.283	0.105	0.04	0.048	248	9000	60.70	ELFIN
	1	direct	xJ	39.3	1.71	0.2	0.26	0.3	494	9000	120.90	ELFIN
	1	direct	xJ	39.4	1.09	0.17	0.18	0.185	453	9000	110.87	ELFIN
	4.54	g/lb*Btu/kWh	xJ	39.5	2.27	1.0442	0.9080	0.1362	2043	10000	450.00	Emission Factors for NG Boil
	1	direct	xJ	79.1	0.08123	0.0423	0.0823	0.0208	108	9000	26.43	Includes feedstock productio
	1	direct	xJ	79.2	1.09	0.17	0.4	0.15	453	9000	110.87	Includes feedstock productio
	1	direct	xJ	79.3	0.08	0.0453	0.183	0.0167	279	9000	68.28	Includes feedstock productio
	1	direct	xJ	79.4	1.09	0.17	0.4	0.15	453	9000	110.87	Includes feedstock productio

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
bE	E85	1	1	Diesel Equip	100	0	0	0	11.1	12.1			b	0.000	0.83	0.00	0.00
bE	E85	1	1	Electricity	18	25	57	0	32.4				xJ	0.000	0.83	0.00	0.00
bE	E85	1	1	Fertilizer	0	100	0	0	18.2				xB	0.000	0.83	0.00	0.00
bE	E85	1	1	Gasoline Equip	100	0	0	0	13.1	14.1			b	0.000	0.83	0.00	0.00
bE	E85	1	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.83	0.00	0.00
bE	E85	1	2	Diesel Truck	100	0	0	0	21.1				b	0.000	0.83	0.00	0.00
bE	E85	1	3	Electricity	18	25	57	0	32.4				xJ	0.000	1.00	1.00	0.00
bE	E85	1	3	NG boiler	100	0	0	0	35.1				xB	3.403	0.83	1.00	4.10
bE	E85	1	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.170	0.17	1.00	1.00
bE	E85	1	3	RFG prod. SC	100	0	0	0	39.1				R	0.170	0.17	1.00	1.00
bE	E85	1	3	Vents fugitives	100	0	0	0	33.1	34.1	35.1		E	0.830	0.83	1.00	1.00
bE	E85	1	4	Fixed roof tank	100	0	0	0	41.3				E	5.061	0.83	6.10	1.00
bE	E85	1	5	none	100	0	0	0	19.9				xJ	0.830	0.83	1.00	1.00
bE	E85	1	5	Port emissions	0	0	0	0	51.3				E	0.000	0.00	0.00	0.00
bE	E85	1	5	Rail transport	3	12	85	0	53.1				E	0.000	0.00	0.00	0.00
bE	E85	1	5	Ship transport	2.6	54.4	43	0	51.1				E	0.000	0.00	0.00	0.00
bE	E85	1	6	Float roof, E85	100	0	0	0	61.3				E	0.000	0.00	0.00	0.00
bE	E85	1	7	Truck emissions	100	0	0	0	73.1				E	1.000	1.00	1.00	1.00
bE	E85	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		E	1.000	1.00	1.00	1.00
bE	E85	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			E	1.000	1.00	1.00	1.00
bE	E85	1	8	Distribution spills	100	0	0	0	82.4				E	1.000	1.00	1.00	1.00
bE	E85	2	1	Diesel Equip	0	0	100	0	11.1	12.1			b	0.538	0.83	1.00	0.65
bE	E85	2	1	Electricity	0	0	100	0	35.3				xJ	0.000	0.83	1.00	0.00
bE	E85	2	1	Fertilizer	0	0	100	0	18.2				xB	0.465	0.83	1.00	0.56
bE	E85	2	1	Gasoline Equip	0	0	100	0	13.1	14.1			b	0.236	0.83	1.00	0.28
bE	E85	2	1	Propane burner	0	0	100	0	18.1				xB	0.116	0.83	1.00	0.14
bE	E85	2	2	Diesel Truck	0	0	100	0	21.2				b	0.133	0.83	1.00	0.16
bE	E85	2	3	Coal Boiler	0	0	100	0	36.1				xB	2.905	0.83	1.00	3.50
bE	E85	2	3	Electricity	0	0	100	0	35.3				xJ	-1.500	1.00	1.00	-1.50
bE	E85	2	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.170	0.17	1.00	1.00
bE	E85	2	3	RFG prod. SC	100	0	0	0	39.2				R	0.170	0.17	1.00	1.00
bE	E85	2	3	Vents fugitives	0	0	100	0	33.1	34.1	35.1		E	0.830	0.83	1.00	1.00
bE	E85	2	4	Float roof	100	0	100	0	41.3				E	0.830	0.83	1.00	1.00
bE	E85	2	5	Pipeline	0	0	0	0	19.9				xJ	0.830	0.83	1.00	1.00
bE	E85	2	5	Port emissions	0	0	0	0	51.3				E	0.000	0.00	0.00	0.00
bE	E85	2	5	Rail transport	5	5	370	0	53.1				E	1.000	1.00	1.00	1.00
bE	E85	2	5	Ship transport	2.6	27.2	21.5	771	51.1				E	0.000	1.00	0.00	1.00
bE	E85	2	6	Float roof, E85	100	0	0	0	61.3				E	0.530	1.00	0.53	1.00
bE	E85	2	7	Truck emissions	100	0	0	0	73.2				E	1.000	1.00	1.00	1.00
bE	E85	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		E	1.000	1.00	1.00	1.00
bE	E85	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			E	1.000	1.00	1.00	1.00
bE	E85	2	8	Distribution spills	100	0	0	0	82.4				E	1.000	1.00	1.00	1.00
bE	E85	3	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.578	0.83	1.00	0.70
bE	E85	3	1	Electricity	0	45	55	0	39.4				xJ	0.058	0.83	1.00	0.07
bE	E85	3	1	Fertilizer	0	100	0	0	18.2				xB	0.066	0.83	1.00	0.08
bE	E85	3	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.065	0.83	1.00	0.08
bE	E85	3	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.83	1.00	0.00
bE	E85	3	2	Diesel Truck	0	100	0	0	21.2				b	0.066	0.83	1.00	0.08
bE	E85	3	3	Biomass boiler, CA	0	100	0	0	37.1				xB	3.021	0.83	1.00	3.64
bE	E85	3	3	Electricity	0	45	55	0	39.4				xJ	-1.780	1.00	1.00	-1.78
bE	E85	3	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.170	0.17	1.00	1.00
bE	E85	3	3	RFG prod. SC	100	0	0	0	39.2				R	0.170	0.17	1.00	1.00
bE	E85	3	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		E	0.440	0.83	0.53	1.00
bE	E85	3	3		0	100	0	0	19.9				xJ	0.000	0.00	0.00	0.00
bE	E85	3	4	Float roof	100	100	0	0	41.3				E	0.440	0.83	0.53	1.00
bE	E85	3	5	Pipeline	0	100	0	0	19.9				xJ	0.830	0.83	1.00	1.00
bE	E85	3	5	Port emissions	0	0	0	0	51.3				E	0.830	0.83	1.00	1.00
bE	E85	3	5	Rail transport	3	12	85	0	53.1				E	0.000	0.00	0.00	0.00
bE	E85	3	5	Ship transport	2.6	27.2	21.5	771	51.1				E	0.000	0.00	0.00	0.00
bE	E85	3	6	Float roof, E85	100	0	0	0	61.3				E	0.530	1.00	0.53	1.00
bE	E85	3	7	Truck emissions	100	0	0	0	73.2				E	1.000	1.00	1.00	1.00
bE	E85	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		E	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
bE	E85	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			E	1.000	1.00	1.00	1.00
bE	E85	3	8	Distribution spills	100	0	0	0	82.4				E	0.600	1.00	0.60	1.00
bE	E85	4	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.578	0.83	1.00	0.70
bE	E85	4	1	Electricity	0	45	55	0	39.4				xJ	0.058	0.83	1.00	0.07
bE	E85	4	1	Fertilizer	0	100	0	0	18.2				xB	0.066	0.83	1.00	0.08
bE	E85	4	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.065	0.83	1.00	0.08
bE	E85	4	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.83	1.00	0.00
bE	E85	4	2	Diesel Truck	0	100	0	0	21.2				b	0.066	0.83	1.00	0.08
bE	E85	4	3	Biomass boiler	0	100	0	0	37.1				xB	3.021	0.83	1.00	3.64
bE	E85	4	3	Electricity	0	45	55	0	39.4				xJ	-1.780	1.00	1.00	-1.78
bE	E85	4	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.170	0.17	1.00	1.00
bE	E85	4	3	RFG prod. SC	100	0	0	0	39.2				R	0.170	0.17	1.00	1.00
bE	E85	4	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		E	0.083	0.83	0.10	1.00
bE	E85	4	3		0	100	0	0	19.9				xJ	0.000	0.00	0.00	0.00
bE	E85	4	4	Float roof	100	100	0	0	41.3				E	0.083	0.83	0.10	1.00
bE	E85	4	5	Pipeline	0	100	0	0	19.9				xJ	0.830	0.83	1.00	1.00
bE	E85	4	5	Port emissions	0	0	0	0	51.3				E	0.000	0.00	0.00	0.00
bE	E85	4	5	Rail transport	3	12	85	0	53.1				E	0.000	0.00	0.00	0.00
bE	E85	4	5	Ship transport	2.6	27.2	21.5	771	51.1				E	0.000	0.00	0.00	0.00
bE	E85	4	6	Float roof, E85	100	0	0	0	61.3				E	0.000	0.00	0.10	0.00
bE	E85	4	7	Truck emissions	100	0	0	0	73.2				E	1.000	1.00	1.00	1.00
bE	E85	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		E	1.000	1.00	1.00	1.00
bE	E85	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			E	0.800	1.00	0.80	1.00
bE	E85	4	8	Distribution spills	100	0	0	0	82.4				E	0.440	1.00	0.44	1.00
bN	M85	1	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.417	0.87	1.00	0.48
bN	M85	1	1	Electricity	0	45	55	0	32.4				xJ	0.043	0.87	1.00	0.05
bN	M85	1	1	Fertilizer	0	100	0	0	18.2				xB	0.043	0.87	1.00	0.05
bN	M85	1	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.043	0.87	1.00	0.05
bN	M85	1	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.87	1.00	0.00
bN	M85	1	2	Diesel Truck	0	100	0	0	21.1				b	0.052	0.87	1.00	0.06
bN	M85	1	3	Electricity	0	45	55	0	32.4				xJ	0.668	0.87	1.00	0.77
bN	M85	1	3	IGT gasifier	0	100	0	0	35.1				bM	0.868	0.87	1.00	1.00
bN	M85	1	3	Reforming	0	100	0	0	32.2				xB	0.000	0.00	0.00	0.00
bN	M85	1	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
bN	M85	1	3	RFG prod. SC	100	0	0	0	39.1				R	0.132	0.13	1.00	1.00
bN	M85	1	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		nM	0.868	0.87	1.00	1.00
bN	M85	1	4	Float roof	0	100	0	0	41.3				M	2.344	0.87	2.70	1.00
bN	M85	1	5	Port emissions	100	0	0	100	51.3				M	0.000	0.00	0.00	0.00
bN	M85	1	5	Rail transport	3	97	0	0	53.1				M	0.000	0.87	1.00	0.00
bN	M85	1	5	Ship transport	2.6	54.4	43	0	51.1				M	0.000	0.00	0.00	0.00
bN	M85	1	5	Truck emissions	100	1600	0	0	73.1				M	1.000	1.00	1.00	1.00
bN	M85	1	5	Truck fugitives	0	100	0	0	71.2	72.1	74.1		M	0.868	0.87	1.00	1.00
bN	M85	1	6	Float roof	100	0	0	0	61.3	61.4			N	2.700	1.00	2.70	1.00
bN	M85	1	7	Truck emissions	100	0	0	0	73.1				N	1.000	1.00	1.00	1.00
bN	M85	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
bN	M85	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
bN	M85	1	8	Distribution spills	100	0	0	0	82.4				N	1.000	1.00	1.00	1.00
bN	M85	2	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.341	0.87	1.00	0.39
bN	M85	2	1	Electricity	0	45	55	0	39.4				xJ	0.023	0.87	1.00	0.03
bN	M85	2	1	Fertilizer	0	100	0	0	18.2				xB	0.039	0.87	1.00	0.05
bN	M85	2	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.038	0.87	1.00	0.04
bN	M85	2	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.87	1.00	0.00
bN	M85	2	2	Diesel Truck	0	100	0	0	21.2				b	0.049	0.87	1.00	0.06
bN	M85	2	3	Adv. gasifier	0	100	0	0	35.2				bM	0.868	0.87	1.00	1.00
bN	M85	2	3	Electricity	0	45	55	0	39.4				xJ	0.929	0.87	1.00	1.07
bN	M85	2	3	Reforming	0	100	0	0	32.2				xB	0.000	0.00	0.00	0.00
bN	M85	2	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
bN	M85	2	3	RFG prod. SC	100	0	0	0	39.2				R	0.132	0.13	1.00	1.00
bN	M85	2	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		nM	0.460	0.87	0.53	1.00
bN	M85	2	4	Float roof	100	100	0	0	41.3				M	0.868	0.87	1.00	1.00
bN	M85	2	5	Port emissions	100	0	0	100	51.3				M	0.000	0.00	0.00	0.00
bN	M85	2	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.000	0.00	0.00	0.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
bN	M85	2	5	Truck emissions	0	0	0	0	73.2				M	0.000	1.00	1.00	0.00
bN	M85	2	5	Truck fugitives	0	100	0	0	71.2	72.1	74.1		M	0.000	0.87	1.00	0.00
bN	M85	2	6	Float roof	100	0	0	0	61.3	61.4			N	0.530	1.00	0.53	1.00
bN	M85	2	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00
bN	M85	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
bN	M85	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
bN	M85	2	8	Distribution spills	100	0	0	0	82.4				N	1.000	1.00	1.00	1.00
bN	M85	3	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.341	0.87	1.00	0.39
bN	M85	3	1	Electricity	0	45	55	0	39.4				xJ	0.023	0.87	1.00	0.03
bN	M85	3	1	Fertilizer	0	100	0	0	18.2				xB	0.039	0.87	1.00	0.05
bN	M85	3	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.038	0.87	1.00	0.04
bN	M85	3	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.87	1.00	0.00
bN	M85	3	2	Diesel Truck	0	100	0	0	21.2				b	0.049	0.87	1.00	0.06
bN	M85	3	3	Adv. gasifier	0	100	0	0	35.2				bM	0.868	0.87	1.00	1.00
bN	M85	3	3	Electricity	0	45	55	0	39.4				xJ	0.929	0.87	1.00	1.07
bN	M85	3	3	Reforming	0	100	0	0	32.2				xB	0.000	0.00	0.00	0.00
bN	M85	3	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
bN	M85	3	3	RFG prod. SC	100	0	0	0	39.2				R	0.132	0.13	1.00	1.00
bN	M85	3	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		nM	0.461	0.87	0.53	1.00
bN	M85	3	4	Float roof	100	100	0	0	41.3				M	0.460	0.87	0.53	1.00
bN	M85	3	5	Port emissions	100	0	0	100	51.3				M	0.000	0.00	0.00	0.00
bN	M85	3	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.000	0.00	0.00	0.00
bN	M85	3	5	Truck emissions	0	0	0	0	73.2				M	0.000	0.87	1.00	0.00
bN	M85	3	5	Truck fugitives	0	100	0	0	71.2	72.1	74.1		M	0.000	0.87	1.00	0.00
bN	M85	3	6	Float roof	100	0	0	0	61.3	61.4			N	0.530	1.00	0.53	1.00
bN	M85	3	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00
bN	M85	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
bN	M85	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
bN	M85	3	8	Distribution spills	100	0	0	0	82.4				N	0.600	1.00	0.60	1.00
bN	M85	4	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.272	0.87	1.00	0.31
bN	M85	4	1	Electricity	0	45	55	0	39.4				xJ	0.023	0.87	1.00	0.03
bN	M85	4	1	Fertilizer	0	100	0	0	18.2				xB	0.039	0.87	1.00	0.05
bN	M85	4	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.038	0.87	1.00	0.04
bN	M85	4	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.87	1.00	0.00
bN	M85	4	2	Diesel Truck	0	100	0	0	21.2				b	0.049	0.87	1.00	0.06
bN	M85	4	3	Adv. gasifier	0	100	0	0	35.2				bM	0.868	0.87	1.00	1.00
bN	M85	4	3	Electricity	0	45	55	0	39.4				xJ	0.929	0.87	1.00	1.07
bN	M85	4	3	Reforming	0	100	0	0	32.2				xB	0.000	0.00	0.00	0.00
bN	M85	4	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
bN	M85	4	3	RFG prod. SC	100	0	0	0	39.2				R	0.132	0.13	1.00	1.00
bN	M85	4	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		nM	0.460	0.87	0.53	1.00
bN	M85	4	4	Float roof	100	100	0	0	41.3				M	0.087	0.87	0.10	1.00
bN	M85	4	5	Port emissions	100	0	0	100	51.3				M	0.000	0.00	0.00	0.00
bN	M85	4	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.000	0.00	0.00	0.00
bN	M85	4	5	Truck emissions	0	0	0	0	73.2				M	0.000	1.00	1.00	0.00
bN	M85	4	5	Truck fugitives	0	100	0	0	71.2	72.1	74.1		M	0.000	0.87	1.00	0.00
bN	M85	4	6	Float roof	100	0	0	0	61.3	61.4			N	0.100	1.00	0.10	1.00
bN	M85	4	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00
bN	M85	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
bN	M85	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	0.800	1.00	0.80	1.00
bN	M85	4	8	Distribution spills	100	0	0	0	82.4				N	0.440	1.00	0.44	1.00
nC	CNG	1	1	Production	20	0	60	20	11.2				n	1.000	1.00	1.00	1.00
nC	CNG	1	2	Incl in production	20	0	60	20	23.1				n	0.000	1.00	0.00	1.00
nC	CNG	1	3	Sweetner plant	5	25	64	6	31.1				n	1.000	1.00	1.00	1.00
nC	CNG	1	4	Pipeline	20	0	60	20	41.1				n	1.000	1.00	1.00	1.00
nC	CNG	1	5	G.T.s CA/ROW 1990	0	25	66	6	52.3				n	0.450	0.45	1.00	1.00
nC	CNG	1	5	G.T.s SC 1990	5	0	0	0	52.1				n	0.450	0.45	1.00	1.00
nC	CNG	1	5	Recips CA/ROW1990	0	25	66	6	51.3				n	0.550	0.55	1.00	1.00
nC	CNG	1	5	Recips SC 1990	5	0	0	0	51.1				n	0.550	0.55	1.00	1.00
nC	CNG	1	5	Transmission	5	25	64	6	53.1				n	1.000	1.00	1.00	1.00
nC	CNG	1	6	Storage	100	0	0	0	61.1				n	1.000	1.00	1.00	1.00
nC	CNG	1	7	Compress, SC 1990	100	0	0	0	79.1				xJ	1.200	1.00	1.20	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
nC	CNG	1	7	Compress CA/US 90	0	25	57	0	79.2				xJ	1.200	1.00	1.20	1.00
nC	CNG	1	7	Distrib. leaks	100	0	0	0	73.1				C	1.000	1.00	1.00	1.00
nC	CNG	1	8	Fill leaks	100	0	0	0	82.1	82.4			C	1.000	1.00	1.00	1.00
nC	CNG	2	1	Production	0	0	50	50	11.2				n	1.000	1.00	1.00	1.00
nC	CNG	2	2	Incl in production	0	0	50	50	23.1				n	1.000	1.00	1.00	1.00
nC	CNG	2	3	Sweetner plant	0	0	50	50	31.1				n	1.000	1.00	1.00	1.00
nC	CNG	2	4	Pipeline	0	0	50	50	41.1				n	1.000	1.00	1.00	1.00
nC	CNG	2	5	G.T.s CA/ROW 2010	0	23	97	10	52.4				n	0.500	0.50	1.00	1.00
nC	CNG	2	5	G.T.s SC 2010	5	0	0	0	52.2				n	0.500	0.50	1.00	1.00
nC	CNG	2	5	Recips CA/ROW 2010	0	23	97	10	51.4				n	0.500	0.50	1.00	1.00
nC	CNG	2	5	Recips SC 2010	5	0	0	0	51.2				n	0.500	0.50	1.00	1.00
nC	CNG	2	5	Transmission	4	17	72	7	53.1				n	1.000	1.00	1.00	1.00
nC	CNG	2	6	Storage	100	0	0	0	61.1				n	1.000	1.00	1.00	1.00
nC	CNG	2	7	Compress SC 2010	100	0	0	0	79.3				xJ	1.200	1.00	1.20	1.00
nC	CNG	2	7	Compress CA/US 2010	0	23	55	0	79.4				xJ	1.200	1.00	1.20	1.00
nC	CNG	2	7	Distrib. leaks	100	0	0	0	73.1				C	1.000	1.00	1.00	1.00
nC	CNG	2	8	Fill leaks	100	0	0	0	82.1	82.4			C	0.800	1.00	0.80	1.00
nC	CNG	3	1	Production	0	0	50	50	11.2				n	1.000	1.00	1.00	1.00
nC	CNG	3	2	Incl in production	0	0	50	50	23.1				n	1.000	1.00	1.00	1.00
nC	CNG	3	3	Sweetner plant	0	0	50	50	31.1				n	1.000	1.00	1.00	1.00
nC	CNG	3	4	Pipeline	0	0	50	50	41.1				n	1.000	1.00	1.00	1.00
nC	CNG	3	5	G.T.s CA/ROW 2010	0	23	97	10	52.4				n	0.500	0.50	1.00	1.00
nC	CNG	3	5	G.T.s SC 2010	5	0	0	0	52.2				n	0.500	0.50	1.00	1.00
nC	CNG	3	5	Recips CA/ROW 2010	0	23	97	10	51.4				n	0.500	0.50	1.00	1.00
nC	CNG	3	5	Recips SC 2010	5	0	0	0	51.2				n	0.500	0.50	1.00	1.00
nC	CNG	3	5	Transmission	4	17	72	7	53.1				n	1.000	1.00	1.00	1.00
nC	CNG	3	6	Storage	100	0	0	0	61.1				n	1.000	1.00	1.00	1.00
nC	CNG	3	7	Compress SC 2010	100	0	0	0	79.3				xJ	1.000	1.00	1.00	1.00
nC	CNG	3	7	Compress CA/US 2010	0	23	55	0	79.4				xJ	1.000	1.00	1.00	1.00
nC	CNG	3	7	Distrib. leaks	100	0	0	0	73.1				C	1.000	1.00	1.00	1.00
nC	CNG	3	8	Fill leaks	100	0	0	0	82.1	82.4			C	0.600	1.00	0.60	1.00
nC	CNG	4	1	Production	0	0	50	50	11.2				n	1.000	1.00	1.00	1.00
nC	CNG	4	2	Incl in production	0	0	50	50	23.1				n	1.000	1.00	1.00	1.00
nC	CNG	4	3	Sweetner plant	0	0	50	50	31.1				n	1.000	1.00	1.00	1.00
nC	CNG	4	4	Pipeline	0	0	50	50	41.1				n	1.000	1.00	1.00	1.00
nC	CNG	4	5	G.T.s CA/ROW 2010	0	23	97	10	52.4				n	0.500	0.50	1.00	1.00
nC	CNG	4	5	G.T.s SC 2010	5	0	0	0	52.2				n	0.500	0.50	1.00	1.00
nC	CNG	4	5	Recips CA/ROW 2010	0	23	97	10	51.4				n	0.500	0.50	1.00	1.00
nC	CNG	4	5	Recips SC 2010	5	0	0	0	51.2				n	0.500	0.50	1.00	1.00
nC	CNG	4	5	Transmission	4	17	72	7	53.1				n	0.600	0.60	1.00	1.00
nC	CNG	4	6	Storage	100	0	0	0	61.1				n	1.000	1.00	1.00	1.00
nC	CNG	4	7	Compress SC 2010	100	0	0	0	79.3				xJ	1.000	1.00	1.00	1.00
nC	CNG	4	7	Compress CA/US 2010	0	23	55	0	79.4				xJ	1.000	1.00	1.00	1.00
nC	CNG	4	7	Distrib. leaks	100	0	0	0	73.1				C	1.000	1.00	1.00	1.00
nC	CNG	4	8	Fill leaks	100	0	0	0	82.1	82.4			C	0.400	1.00	0.40	1.00
nH	H2	1	1	Solar	0	0	0	100	19.9				xJ	0.000	1.00	0.00	0.00
nH	H2	1	2	Solar	0	0	0	100	19.9				xJ	0.000	1.00	0.00	0.00
nH	H2	1	2	Solar	0	0	0	100	19.9				xJ	0.000	1.00	0.00	0.00
nH	H2	1	3	Solar	0	0	0	100	19.9				xJ	0.000	1.00	0.00	0.00
nH	H2	1	4	Solar	100	0	0	0	19.9				xJ	0.000	1.00	0.00	0.00
nH	H2	1	5	Solar	100	0	0	0	19.9				xJ	0.000	1.00	0.00	0.00
nH	H2	1	6	Solar	100	0	0	0	19.9				xJ	0.000	0.00	0.00	0.00
nH	H2	1	7	Compression	18	25	57	0	32.4				xJ	1.430	1.00	1.10	1.30
nH	H2	1	8	Distribution fugiti	100	0	0	0	19.9				xJ	0.000	1.00	0.00	0.00
nH	H2	2	1	Production	0	0	50	50	11.2	53.1	31.1		n	1.000	1.01	1.00	0.99
nH	H2	2	2	Recips US 1990	0	23	97	10	51.3				n	1.000	1.01	1.00	0.99
nH	H2	2	3	Electricity	0	45	55	0	39.4				xJ	4.545	1.01	1.00	4.50
nH	H2	2	3	Reforming	0	100	0	0	32.3				xB	5.818	1.01	1.00	5.76
nH	H2	2	3	Vents fugitives	0	100	0	0	33.1				H	1.010	1.01	1.00	1.00
nH	H2	2	4	storage	0	100	0	0	41.1				H	1.010	1.01	1.00	1.00
nH	H2	2	5	Rail transport	3	12	85	0	51.1				H	0.000	1.01	0.00	0.00
nH	H2	2	6	storage	0	100	0	0	61.1				H	1.010	1.01	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
nH	H2	2	7	Truck emissions	100	100	0	0	73.2				H	1.010	1.01	1.00	1.00
nH	H2	2	8	Distribution	100	0	0	0	19.9				xJ	1.010	1.01	1.00	1.00
nH	H2	3	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.397	1.01	1.00	0.39
nH	H2	3	1	Electricity	0	45	55	0	39.4				xJ	0.026	1.01	1.00	0.03
nH	H2	3	1	Fertilizer	0	100	0	0	18.2				xB	0.045	1.01	1.00	0.05
nH	H2	3	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.044	1.01	1.00	0.04
nH	H2	3	1	Propane burner	0	100	0	0	18.1				xB	0.000	1.01	1.00	0.00
nH	H2	3	2	Diesel Truck	0	100	0	0	21.2				b	0.057	1.01	1.00	0.06
nH	H2	3	3	Electricity	0	45	55	0	39.4				xJ	6.242	1.01	1.00	6.18
nH	H2	3	3	Gasifier	0	100	0	0	32.3				H	1.010	1.01	1.00	1.00
nH	H2	3	3	Vents fugitives	0	100	0	0	33.1				H	1.010	1.01	1.00	1.00
nH	H2	3	4	Storage	0	100	0	0	41.1				H	0.000	1.01	0.00	0.00
nH	H2	3	5	Rail transport	3	12	85	0	51.1				H	0.000	1.01	0.00	0.00
nH	H2	3	6	Storage	0	100	0	0	61.1				H	1.010	1.01	1.00	1.00
nH	H2	3	7	Truck emissions	100	100	0	0	73.2				H	1.010	1.01	1.00	1.00
nH	H2	3	8	Distribution spills	100	0	0	0	19.9				xJ	0.000	1.01	0.00	0.00
nH	H2	4	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.397	1.01	1.00	0.39
nH	H2	4	1	Electricity	0	45	55	0	39.4				xJ	0.026	1.01	1.00	0.03
nH	H2	4	1	Fertilizer	0	100	0	0	18.2				xB	0.045	1.01	1.00	0.05
nH	H2	4	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.044	1.01	1.00	0.04
nH	H2	4	1	Propane burner	0	100	0	0	18.1				xB	0.000	1.01	1.00	0.00
nH	H2	4	2	Diesel Truck	0	100	0	0	21.2				b	0.057	1.01	1.00	0.06
nH	H2	4	3	Electricity	0	45	55	0	39.4				xJ	6.242	1.01	1.00	6.18
nH	H2	4	3	Gasifier	0	100	0	0	32.3				H	1.010	1.01	1.00	1.00
nH	H2	4	3	Vents fugitives	0	100	0	0	33.1				H	1.010	1.01	1.00	1.00
nH	H2	4	4	Storage	0	100	0	0	41.1				H	0.000	1.01	0.00	0.00
nH	H2	4	5	Rail transport	3	12	85	0	51.1				H	0.000	1.01	0.00	0.00
nH	H2	4	6	Storage	0	100	0	0	61.1				H	1.010	1.01	1.00	1.00
nH	H2	4	7	Truck emissions	100	100	0	0	73.2				H	1.010	1.01	1.00	1.00
nH	H2	4	8	Distribution spills	100	0	0	0	19.9				xJ	0.000	1.01	0.00	0.00
nH	H2	4	8	Distribution spills	100	0	0	0	19.9				xJ	0.000	1.01	0.00	0.00
nL	LNG	1	1	Production	0	0	100	0	11.2	53.1	31.1		n	1.100	1.00	1.00	1.10
nL	LNG	1	2	G.T.s US 2010	0	0	20	0	52.3				n	0.550	0.50	1.00	1.10
nL	LNG	1	2	Recips US 1990	0	0	20	0	51.3				n	0.550	0.50	1.00	1.10
nL	LNG	1	3	Liquefaction	0	0	100	0	32.3				xJ	0.040	1.00	1.00	0.04
nL	LNG	1	4	Storage	0	0	100	0	41.1				L	1.000	1.00	1.00	1.00
nL	LNG	1	5	Transport	0	0	0	0	51.1	51.3	53.1		L	0.000	0.00	1.00	1.00
nL	LNG	1	6	Storage	0	0	100	0	61.1				L	1.000	1.00	1.00	1.00
nL	LNG	1	7	Truck emissions	100	100	4000	0	73.1				L	1.000	1.00	1.00	1.00
nL	LNG	1	7	Truck fugitives	100	0	0	0	72.1	72.7	74.1		L	1.000	1.00	1.00	1.00
nL	LNG	1	8	Fill leaks	100	0	0	0	82.4				L	1.000	1.00	1.00	1.00
nL	LNG	2	1	Production	0	0	50	50	11.2	53.1	31.1		n	1.100	1.00	1.00	1.10
nL	LNG	2	2	G.T.s US 2010	0	23	97	10	52.4				n	0.000	0.00	1.00	1.10
nL	LNG	2	2	Recips US 2010	0	23	97	10	51.4				n	0.550	0.50	1.00	1.10
nL	LNG	2	3	Liquefaction	0	45	55	0	39.4				xJ	0.040	1.00	1.00	0.04
nL	LNG	2	3	Liquefaction	0	100	0	0	51.4				n	2.060	1.00	1.00	2.06
nL	LNG	2	4	Storage	0	100	0	0	41.1				L	1.000	1.00	1.00	1.00
nL	LNG	2	5	Transport	0	0	0	0	51.1	51.3	53.1		L	0.000	0.00	1.00	1.00
nL	LNG	2	6	Storage	0	100	0	0	61.1				L	1.000	1.00	1.00	1.00
nL	LNG	2	7	Truck emissions	100	100	0	0	73.2				L	1.000	1.00	1.00	1.00
nL	LNG	2	7	Truck fugitives	100	0	0	0	72.1	74.1			L	1.000	1.00	1.00	1.00
nL	LNG	2	8	Fill leaks	100	0	0	0	82.4				L	1.000	1.00	1.00	1.00
nL	LNG	3	1	Production	0	0	50	50	11.2	53.1	31.1		n	1.050	1.00	1.00	1.05
nL	LNG	3	2	G.T.s US 2010	0	23	97	10	52.4				n	0.000	0.00	1.00	1.05
nL	LNG	3	2	Recips US 2010	0	23	97	10	51.4				n	0.525	0.50	1.00	1.05
nL	LNG	3	3	Liquefaction	0	45	55	0	39.4				xJ	0.040	1.00	1.00	0.04
nL	LNG	3	3	Liquefaction	0	100	0	0	51.4				n	1.830	1.00	1.00	1.83
nL	LNG	3	4	Storage	0	100	0	0	41.1				L	1.000	1.00	1.00	1.00
nL	LNG	3	5	Transport	0	0	0	0	53.1				L	0.000	0.00	1.00	1.00
nL	LNG	3	6	Storage	0	100	0	0	61.1				L	1.000	1.00	1.00	1.00
nL	LNG	3	7	Truck emissions	100	100	0	0	73.2				L	1.000	1.00	1.00	1.00
nL	LNG	3	7	Truck fugitives	100	0	0	0	72.1	74.1			L	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
nL	LNG	3	8	Fill leaks	100	0	0	0	82.4				L	1.000	1.00	1.00	1.00
nL	LNG	4	1	Production	0	0	50	50	11.2	53.1	31.1		n	1.050	1.00	1.00	1.05
nL	LNG	4	2	G.T.s US 2010	0	23	97	10	52.4				n	0.525	0.50	1.00	1.05
nL	LNG	4	2	Recips US 2010	0	23	97	10	51.4				n	0.525	0.50	1.00	1.05
nL	LNG	4	3	Liquefaction	0	45	55	0	39.4				xJ	0.040	1.00	1.00	0.04
nL	LNG	4	3	Liquefaction	0	100	0	0	51.4				n	1.830	1.00	1.00	1.83
nL	LNG	4	4	Storage	0	100	0	0	41.1				L	1.000	1.00	1.00	1.00
nL	LNG	4	5	Transport	0	0	0	0	53.1				L	0.000	0.00	1.00	1.00
nL	LNG	4	6	Storage	0	100	0	0	61.1				L	1.000	1.00	1.00	1.00
nL	LNG	4	7	Truck emissions	100	100	0	0	73.2				L	1.000	1.00	1.00	1.00
nL	LNG	4	7	Truck fugitives	100	0	0	0	72.1	74.1			L	1.000	1.00	1.00	1.00
nL	LNG	4	8	Fill leaks	100	0	0	0	82.4				L	1.000	1.00	1.00	1.00
nM	M100	1	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.941	1.00	1.00	0.94
nM	M100	1	2	G.T.s US 1990	0	0	0	20	52.3				n	0.471	0.50	1.00	0.94
nM	M100	1	2	Recips US 1990	0	0	0	20	51.3				n	0.471	0.50	1.00	0.94
nM	M100	1	3	Electricity	0	0	0	100	39.5				xJ	-0.040	1.00	1.00	-0.04
nM	M100	1	3	Part-ox.	0	0	0	100	32.3				nM	0.000	0.00	0.00	0.00
nM	M100	1	3	Reforming	0	0	0	100	32.2				xB	3.220	1.00	1.00	3.22
nM	M100	1	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	1.000	1.00	1.00	1.00
nM	M100	1	4	Float roof	0	0	0	100	41.3				M	1.000	1.00	1.00	1.00
nM	M100	1	5	Port emissions	100	0	0	100	51.3				M	1.000	1.00	1.00	1.00
nM	M100	1	5	Ship transport	2.6	54.4	43	0	51.1				M	1.000	1.00	1.00	1.00
nM	M100	1	6	Float roof	100	0	0	0	61.3				M	2.700	1.00	2.70	1.00
nM	M100	1	7	Truck emissions	100	0	0	0	73.1				M	0.000	1.00	1.00	0.00
nM	M100	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		M	1.000	1.00	1.00	1.00
nM	M100	1	8	Distribution fugiti	100	0	0	0	82.4				M	1.000	1.00	1.00	1.00
nM	M100	1	8	Distribution spills	100	0	0	0	82.4				M	1.000	1.00	1.00	1.00
nM	M100	2	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.896	1.00	1.00	0.90
nM	M100	2	2	G.T.s US 1990	0	0	0	20	52.3				n	0.448	0.50	1.00	0.90
nM	M100	2	2	Recips US 1990	0	0	0	20	51.3				n	0.448	0.50	1.00	0.90
nM	M100	2	3	Electricity	0	0	0	100	39.5				xJ	0.080	1.00	1.00	0.08
nM	M100	2	3	Part-ox.	0	0	0	100	32.3				nM	0.500	0.50	1.00	1.00
nM	M100	2	3	Reforming	0	0	0	100	32.2				xB	1.500	0.50	1.00	3.00
nM	M100	2	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	1.000	1.00	1.00	1.00
nM	M100	2	4	Float roof	0	0	0	100	41.3				M	1.000	1.00	1.00	1.00
nM	M100	2	5	Port emissions	100	0	0	100	51.3				M	1.000	1.00	1.00	1.00
nM	M100	2	5	Ship transport	2.6	27.2	21.5	771	51.1				M	1.000	1.00	1.00	1.00
nM	M100	2	6	Float roof	100	0	0	0	61.3				M	0.530	1.00	0.53	1.00
nM	M100	2	7	Truck emissions	100	0	0	0	73.2				M	1.000	1.00	1.00	1.00
nM	M100	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		M	1.000	1.00	1.00	1.00
nM	M100	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			M	1.000	1.00	1.00	1.00
nM	M100	2	8	Distribution spills	100	0	0	0	82.4				M	1.000	1.00	1.00	1.00
nM	M100	3	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.896	1.00	1.00	0.90
nM	M100	3	2	G.T.s US 1990	0	0	0	20	52.3				n	0.448	0.50	1.00	0.90
nM	M100	3	2	Recips US 1990	0	0	0	20	51.3				n	0.448	0.50	1.00	0.90
nM	M100	3	3	Electricity	0	0	0	100	39.5				xJ	0.080	1.00	1.00	0.08
nM	M100	3	3	Part-ox.	0	0	0	100	32.3				nM	0.500	0.50	1.00	1.00
nM	M100	3	3	Reforming	0	0	0	100	32.2				xB	0.600	1.00	0.20	3.00
nM	M100	3	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	0.500	0.50	1.00	1.00
nM	M100	3	4	Float roof	0	0	0	100	41.3				M	1.000	1.00	1.00	1.00
nM	M100	3	5	Port emissions	100	0	0	100	51.3				M	1.000	1.00	1.00	1.00
nM	M100	3	5	Ship transport	2.6	27.2	21.5	771	51.1				M	1.000	1.00	1.00	1.00
nM	M100	3	6	Float roof	100	0	0	0	61.3				M	0.530	1.00	0.53	1.00
nM	M100	3	7	Truck emissions	100	0	0	0	73.2				M	1.000	1.00	1.00	1.00
nM	M100	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		M	1.000	1.00	1.00	1.00
nM	M100	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			M	1.000	1.00	1.00	1.00
nM	M100	3	8	Distribution spills	100	0	0	0	82.4				M	0.600	1.00	0.60	1.00
nM	M100	4	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.896	1.00	1.00	0.90
nM	M100	4	2	G.T.s US 1990	0	0	0	20	52.3				n	0.448	0.50	1.00	0.90
nM	M100	4	2	Recips US 1990	0	0	0	20	51.3				n	0.448	0.50	1.00	0.90
nM	M100	4	3	Electricity	0	0	0	100	39.5				xJ	0.080	1.00	1.00	0.08
nM	M100	4	3	Part-ox.	0	0	0	100	32.3				nM	0.500	0.50	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
nM	M100	4	3	Reforming	0	0	0	100	32.2				xB	1.500	0.50	1.00	3.00
nM	M100	4	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	1.000	1.00	1.00	1.00
nM	M100	4	4	Float roof	0	0	0	100	41.3				M	1.000	1.00	1.00	1.00
nM	M100	4	5	Port emissions	100	0	0	100	51.3				M	1.000	1.00	1.00	1.00
nM	M100	4	5	Ship transport	2.6	27.2	21.5	771	51.1				M	1.000	1.00	1.00	1.00
nM	M100	4	6	Float roof	100	0	0	0	61.3				M	0.100	1.00	0.10	1.00
nM	M100	4	7	Truck emissions	100	0	0	0	73.2				M	1.000	1.00	1.00	1.00
nM	M100	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		M	1.000	1.00	1.00	1.00
nM	M100	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			M	0.800	1.00	0.80	1.00
nM	M100	4	8	Distribution spills	100	0	0	0	82.4				M	0.440	1.00	0.44	1.00
nN	M85	1	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.817	0.87	1.00	0.94
nN	M85	1	2	G.T.s US 1990	0	0	0	20	52.3				n	0.408	0.43	1.00	0.94
nN	M85	1	2	Recips US 1990	0	0	0	20	51.3				n	0.408	0.43	1.00	0.94
nN	M85	1	3	Electricity	0	0	0	100	39.5				xJ	-0.035	0.87	1.00	-0.04
nN	M85	1	3	Part-ox.	0	0	0	100	32.3				nM	0.000	0.00	0.00	0.00
nN	M85	1	3	Reforming	0	0	0	100	32.2				xB	2.795	0.87	1.00	3.22
nN	M85	1	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
nN	M85	1	3	RFG prod. SC	100	0	0	0	39.1				R	0.132	0.13	1.00	1.00
nN	M85	1	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	0.868	0.87	1.00	1.00
nN	M85	1	4	Float roof	0	0	0	100	41.3				M	0.868	0.87	1.00	1.00
nN	M85	1	5	Port emissions	100	0	0	100	51.3				M	0.868	0.87	1.00	1.00
nN	M85	1	5	Ship transport	2.6	54.4	43	0	51.1				M	0.868	0.87	1.00	1.00
nN	M85	1	6	Float roof	100	0	0	0	61.3	61.4			R	0.132	0.13	1.00	1.00
nN	M85	1	6	Float roof	100	0	0	0	61.3				M	2.344	0.87	2.70	1.00
nN	M85	1	7	Truck emissions	100	0	0	0	73.1				N	1.000	1.00	1.00	1.00
nN	M85	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
nN	M85	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
nN	M85	1	8	Distribution spills	100	0	0	0	82.4				N	1.000	1.00	1.00	1.00
nN	M85	2	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.778	0.87	1.00	0.90
nN	M85	2	2	G.T.s US 1990	0	0	0	20	52.3				n	0.389	0.43	1.00	0.90
nN	M85	2	2	Recips US 1990	0	0	0	20	51.3				n	0.389	0.43	1.00	0.90
nN	M85	2	3	Electricity	0	0	0	100	39.5				xJ	0.069	0.87	1.00	0.08
nN	M85	2	3	Part-ox.	0	0	0	100	32.3				nM	0.434	0.43	1.00	1.00
nN	M85	2	3	Reforming	0	0	0	100	32.2				xB	1.302	0.43	1.00	3.00
nN	M85	2	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
nN	M85	2	3	RFG prod. SC	100	0	0	0	39.2				R	0.132	0.13	1.00	1.00
nN	M85	2	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	0.868	0.87	1.00	1.00
nN	M85	2	4	Float roof	0	0	0	100	41.3				M	0.868	0.87	1.00	1.00
nN	M85	2	5	Port emissions	100	0	0	100	51.3				M	0.868	0.87	1.00	1.00
nN	M85	2	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.868	0.87	1.00	1.00
nN	M85	2	6	Float roof	100	0	0	0	61.3				M	0.460	0.87	0.53	1.00
nN	M85	2	6	Float roof	100	0	0	0	61.3	61.4			R	0.070	0.13	0.53	1.00
nN	M85	2	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00
nN	M85	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
nN	M85	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
nN	M85	2	8	Distribution spills	100	0	0	0	82.4				N	1.000	1.00	1.00	1.00
nN	M85	3	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.778	0.87	1.00	0.90
nN	M85	3	2	G.T.s US 1990	0	0	0	20	52.3				n	0.389	0.43	1.00	0.90
nN	M85	3	2	Recips US 1990	0	0	0	20	51.3				n	0.389	0.43	1.00	0.90
nN	M85	3	3	Electricity	0	0	0	100	39.5				xJ	0.069	0.87	1.00	0.08
nN	M85	3	3	Part-ox.	0	0	0	100	32.3				nM	0.434	0.43	1.00	1.00
nN	M85	3	3	Reforming	0	0	0	100	32.2				xB	0.521	0.87	0.20	3.00
nN	M85	3	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.130	0.13	1.00	1.00
nN	M85	3	3	RFG prod. SC	100	0	0	0	39.2				R	0.130	0.13	1.00	1.00
nN	M85	3	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	0.434	0.43	1.00	1.00
nN	M85	3	4	Float roof	0	0	0	100	41.3				M	0.868	0.87	1.00	1.00
nN	M85	3	5	Port emissions	100	0	0	100	51.3				M	0.868	0.87	1.00	1.00
nN	M85	3	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.868	0.87	1.00	1.00
nN	M85	3	6	Float roof	100	0	0	0	61.3				M	0.460	0.87	0.53	1.00
nN	M85	3	6	Float roof	100	0	0	0	61.3	61.4			R	0.070	0.13	0.53	1.00
nN	M85	3	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00
nN	M85	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
nN	M85	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
nN	M85	3	8	Distribution spills	100	0	0	0	82.4				N	0.600	1.00	0.60	1.00
nN	M85	4	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.778	0.87	1.00	0.90
nN	M85	4	2	G.T.s US 1990	0	0	0	20	52.3				n	0.389	0.43	1.00	0.90
nN	M85	4	2	Recips US 1990	0	0	0	20	51.3				n	0.389	0.43	1.00	0.90
nN	M85	4	3	Electricity	0	0	0	100	39.5				xJ	0.069	0.87	1.00	0.08
nN	M85	4	3	Part-ox.	0	0	0	100	32.3				nM	0.434	0.43	1.00	1.00
nN	M85	4	3	Reforming	0	0	0	100	32.2				xB	1.302	0.43	1.00	3.00
nN	M85	4	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
nN	M85	4	3	RFG prod. SC	100	0	0	0	39.2				R	0.132	0.13	1.00	1.00
nN	M85	4	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	0.460	0.87	0.53	1.00
nN	M85	4	4	Float roof	0	0	0	100	41.3				M	0.868	0.87	1.00	1.00
nN	M85	4	5	Port emissions	100	0	0	100	51.3				M	0.868	0.87	1.00	1.00
nN	M85	4	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.868	0.87	1.00	1.00
nN	M85	4	6	Float roof	100	0	0	0	61.3				M	0.087	0.87	0.10	1.00
nN	M85	4	6	Float roof	100	0	0	0	61.3	61.4			R	0.013	0.13	0.10	1.00
nN	M85	4	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00
nN	M85	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
nN	M85	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	0.800	1.00	0.80	1.00
nN	M85	4	8	Distribution spills	100	0	0	0	82.4				N	0.440	1.00	0.44	1.00
oD	Diese	1	1	Combustion ROW	0	0	450	50	11.1	11.2			o	0.250	1.00	1.00	0.25
oD	Diese	1	1	Combustion SC/CA	100	400	0	0	11.1	11.2			o	0.250	1.00	1.00	0.25
oD	Diese	1	1	Oil field ROW	0	0	450	50	13.1	13.2	14.1		o	0.250	1.00	1.00	0.25
oD	Diese	1	1	Oil field storage,	100	400	0	0	13.1	13.2	14.1		o	0.250	1.00	1.00	0.25
oD	Diese	1	1	Pumps, fugit	100	400	450	50	12.1	12.2			o	0.250	1.00	1.00	0.25
oD	Diese	1	2	Pipelines SC	100	0	0	0	27.1				o	0.125	0.50	1.00	0.25
oD	Diese	1	2	Port emissions	100	0	90	10	21.3				o	0.125	0.50	1.00	0.25
oD	Diese	1	2	Ships, oil transpor	2.6	18	2.03	311	21.4				o	0.125	0.50	1.00	0.25
oD	Diese	1	3	Crude storage ROW	0	0	45	5	35.1	34.2			G	0.250	1.00	1.00	0.25
oD	Diese	1	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.250	1.00	1.00	0.25
oD	Diese	1	3	Electricity	18	25	57	0	32.4				xJ	0.450	1.00	1.00	0.45
oD	Diese	1	3	Natural Gas	100	0	0	0	39.1				n	0.050	1.00	1.00	0.05
oD	Diese	1	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oD	Diese	1	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.480	1.00	1.00	0.48
oD	Diese	1	3	Refinery energy	100	0	0	0	31.2				G	0.480	1.00	1.00	0.48
oD	Diese	1	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.100	0.10	1.00	1.00
oD	Diese	1	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.250	1.00	1.00	0.25
oD	Diese	1	4	Float roof	100	0	0	0	41.3				D	1.000	1.00	1.00	1.00
oD	Diese	1	5	Pipeline	100	0	0	0	51.2				D	1.000	1.00	1.00	1.00
oD	Diese	1	6	Float roof	100	0	0	0	61.3	61.4			D	1.000	1.00	1.00	1.00
oD	Diese	1	7	Truck emissions	100	0	0	0	73.1				D	1.000	1.00	1.00	1.00
oD	Diese	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		D	1.000	1.00	1.00	1.00
oD	Diese	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			D	1.000	1.00	1.00	1.00
oD	Diese	1	8	Distribution spills	100	0	0	0	82.4				D	1.000	1.00	1.00	1.00
oD	Diese	2	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.250	1.00	1.00	0.25
oD	Diese	2	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.053	1.00	0.21	0.25
oD	Diese	2	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.250	1.00	1.00	0.25
oD	Diese	2	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.133	1.00	0.53	0.25
oD	Diese	2	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.133	1.00	0.53	0.25
oD	Diese	2	2	Pipelines SC	100	0	0	0	27.1				o	0.105	0.42	1.00	0.25
oD	Diese	2	2	Port emissions	100	0	58	42	21.3				o	0.145	0.58	1.00	0.25
oD	Diese	2	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.170	0.68	1.00	0.25
oD	Diese	2	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.250	1.00	1.00	0.25
oD	Diese	2	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.133	1.00	0.53	0.25
oD	Diese	2	3	Electricity	22	23	55	0	39.4				xJ	0.450	1.00	1.00	0.45
oD	Diese	2	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oD	Diese	2	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oD	Diese	2	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.101	1.00	0.21	0.48
oD	Diese	2	3	Refinery energy	100	0	0	0	31.2				G	0.480	1.00	1.00	0.48
oD	Diese	2	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.100	0.10	1.00	1.00
oD	Diese	2	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.133	1.00	0.53	0.25
oD	Diese	2	4	Float roof	100	0	0	0	41.3				D	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oD	Diese	2	5	Pipeline	100	0	0	0	51.2				D	1.000	1.00	1.00	1.00
oD	Diese	2	6	Float roof	100	0	0	0	61.3	61.4			D	1.000	1.00	1.00	1.00
oD	Diese	2	7	Truck emissions	100	0	0	0	73.2				D	1.000	1.00	1.00	1.00
oD	Diese	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		D	1.000	1.00	1.00	1.00
oD	Diese	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			D	1.000	1.00	1.00	1.00
oD	Diese	2	8	Distribution spills	100	0	0	0	82.4				D	1.000	1.00	1.00	1.00
oD	Diese	3	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.250	1.00	1.00	0.25
oD	Diese	3	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.053	1.00	0.21	0.25
oD	Diese	3	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.250	1.00	1.00	0.25
oD	Diese	3	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.133	1.00	0.53	0.25
oD	Diese	3	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.133	1.00	0.53	0.25
oD	Diese	3	2	Pipelines SC	100	0	0	0	27.1				o	0.105	0.42	1.00	0.25
oD	Diese	3	2	Port emissions	100	0	58	42	21.3				o	0.145	0.58	1.00	0.25
oD	Diese	3	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.170	0.68	1.00	0.25
oD	Diese	3	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.250	1.00	1.00	0.25
oD	Diese	3	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.133	1.00	0.53	0.25
oD	Diese	3	3	Electricity	22	23	55	0	39.4				xJ	0.450	1.00	1.00	0.45
oD	Diese	3	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oD	Diese	3	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oD	Diese	3	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.101	1.00	0.21	0.48
oD	Diese	3	3	Refinery energy	100	0	0	0	31.2				G	0.480	1.00	1.00	0.48
oD	Diese	3	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.100	0.10	1.00	1.00
oD	Diese	3	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.133	1.00	0.53	0.25
oD	Diese	3	4	Float roof	100	0	0	0	41.3				D	1.000	1.00	1.00	1.00
oD	Diese	3	5	Pipeline	100	0	0	0	51.2				D	1.000	1.00	1.00	1.00
oD	Diese	3	6	Float roof	100	0	0	0	61.3	61.4			D	1.000	1.00	1.00	1.00
oD	Diese	3	7	Truck emissions	100	0	0	0	73.2				D	1.000	1.00	1.00	1.00
oD	Diese	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		D	1.000	1.00	1.00	1.00
oD	Diese	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			D	1.000	1.00	1.00	1.00
oD	Diese	3	8	Distribution spills	100	0	0	0	82.4				D	0.600	1.00	0.60	1.00
oD	Diese	4	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.250	1.00	1.00	0.25
oD	Diese	4	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.053	1.00	0.21	0.25
oD	Diese	4	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.250	1.00	1.00	0.25
oD	Diese	4	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.133	1.00	0.53	0.25
oD	Diese	4	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.133	1.00	0.53	0.25
oD	Diese	4	2	Pipelines SC	100	0	0	0	27.1				o	0.105	0.42	1.00	0.25
oD	Diese	4	2	Port emissions	100	0	58	42	21.3				o	0.145	0.58	1.00	0.25
oD	Diese	4	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.170	0.68	1.00	0.25
oD	Diese	4	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.250	1.00	1.00	0.25
oD	Diese	4	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.133	1.00	0.53	0.25
oD	Diese	4	3	Electricity	22	23	55	0	39.4				xJ	0.450	1.00	1.00	0.45
oD	Diese	4	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oD	Diese	4	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oD	Diese	4	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.101	1.00	0.21	0.48
oD	Diese	4	3	Refinery energy	100	0	0	0	31.2				G	0.480	1.00	1.00	0.48
oD	Diese	4	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.100	0.10	1.00	1.00
oD	Diese	4	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.133	1.00	0.53	0.25
oD	Diese	4	4	Float roof	100	0	0	0	41.3				D	1.000	1.00	1.00	1.00
oD	Diese	4	5	Pipeline	100	0	0	0	51.2				D	1.000	1.00	1.00	1.00
oD	Diese	4	6	Float roof	100	0	0	0	61.3	61.4			D	1.000	1.00	1.00	1.00
oD	Diese	4	7	Truck emissions	100	0	0	0	73.2				D	1.000	1.00	1.00	1.00
oD	Diese	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		D	1.000	1.00	1.00	1.00
oD	Diese	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			D	0.800	1.00	0.80	1.00
oD	Diese	4	8	Distribution spills	100	0	0	0	82.4				D	0.440	1.00	0.44	1.00
oD	Diese	4	8	Distribution spills	100	0	0	0	82.4				D	0.440	1.00	0.44	1.00
oG	Gasol	1	1	Combustion SC/CA	100	400	0	0	11.1	11.2			o	0.560	1.00	1.00	0.56
oG	Gasol	1	1	Combustion US/ROW	0	0	450	50	11.1	11.2			o	0.560	1.00	1.00	0.56
oG	Gasol	1	1	Oil field ROW	0	0	450	50	13.1	13.2	14.1		o	0.560	1.00	1.00	0.56
oG	Gasol	1	1	Oil field storage,	100	400	0	0	13.1	13.2	14.1		o	0.560	1.00	1.00	0.56
oG	Gasol	1	1	Pumps, fugit	100	400	450	50	12.1	12.2			o	0.560	1.00	1.00	0.56
oG	Gasol	1	2	Pipelines SC	100	0	0	0	27.1				o	0.280	0.50	1.00	0.56
oG	Gasol	1	2	Port emissions	100	0	90	10	21.3				o	0.280	0.50	1.00	0.56

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oG	Gasol	1	2	Ships, oil transpor	2.6	18	2.03	311	21.4				o	0.280	0.50	1.00	0.56
oG	Gasol	1	3	Crude storage ROW	0	0	45	5	35.1	34.2			G	0.560	1.00	1.00	0.56
oG	Gasol	1	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.560	1.00	1.00	0.56
oG	Gasol	1	3	Electricity	18	25	57	0	32.4				xJ	0.750	1.00	1.00	0.75
oG	Gasol	1	3	Natural Gas	100	0	0	0	39.1				n	0.050	1.00	1.00	0.05
oG	Gasol	1	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oG	Gasol	1	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.690	1.00	1.00	0.69
oG	Gasol	1	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oG	Gasol	1	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.950	0.95	1.00	1.00
oG	Gasol	1	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.690	1.00	1.00	0.69
oG	Gasol	1	4	Float roof	100	0	0	0	41.3				G	1.000	1.00	1.00	1.00
oG	Gasol	1	5	Pipeline	100	0	0	0	51.2				G	1.000	1.00	1.00	1.00
oG	Gasol	1	6	Float roof	100	0	0	0	61.3	61.4			G	1.000	1.00	1.00	1.00
oG	Gasol	1	7	Truck emissions	100	0	0	0	73.1				G	1.000	1.00	1.00	1.00
oG	Gasol	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		G	1.000	1.00	1.00	1.00
oG	Gasol	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			G	1.000	1.00	1.00	1.00
oG	Gasol	1	8	Distribution spills	100	0	0	0	82.4				G	1.000	1.00	1.00	1.00
oG	Gasol	2	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.560	1.00	1.00	0.56
oG	Gasol	2	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.118	1.00	0.21	0.56
oG	Gasol	2	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.560	1.00	1.00	0.56
oG	Gasol	2	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.297	1.00	0.53	0.56
oG	Gasol	2	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.297	1.00	0.53	0.56
oG	Gasol	2	2	Pipelines SC	100	0	0	0	27.1				o	0.235	0.42	1.00	0.56
oG	Gasol	2	2	Port emissions	100	0	58	42	21.3				o	0.325	0.58	1.00	0.56
oG	Gasol	2	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.381	0.68	1.00	0.56
oG	Gasol	2	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.560	1.00	1.00	0.56
oG	Gasol	2	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.297	1.00	0.53	0.56
oG	Gasol	2	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
oG	Gasol	2	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oG	Gasol	2	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oG	Gasol	2	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69
oG	Gasol	2	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oG	Gasol	2	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.950	0.95	1.00	1.00
oG	Gasol	2	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oG	Gasol	2	4	Float roof	100	0	0	0	41.3				G	0.530	1.00	0.53	1.00
oG	Gasol	2	5	Pipeline	100	0	0	0	51.2				G	1.000	1.00	1.00	1.00
oG	Gasol	2	6	Float roof	100	0	0	0	61.3	61.4			G	0.530	1.00	0.53	1.00
oG	Gasol	2	7	Truck emissions	100	0	0	0	73.2				G	1.000	1.00	1.00	1.00
oG	Gasol	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		G	1.000	1.00	1.00	1.00
oG	Gasol	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			G	1.000	1.00	1.00	1.00
oG	Gasol	2	8	Distribution spills	100	0	0	0	82.4				G	1.000	1.00	1.00	1.00
oG	Gasol	3	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.560	1.00	1.00	0.56
oG	Gasol	3	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.118	1.00	0.21	0.56
oG	Gasol	3	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.560	1.00	1.00	0.56
oG	Gasol	3	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.297	1.00	0.53	0.56
oG	Gasol	3	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.297	1.00	0.53	0.56
oG	Gasol	3	2	Pipelines SC	100	0	0	0	27.1				o	0.235	0.42	1.00	0.56
oG	Gasol	3	2	Port emissions	100	0	58	42	21.3				o	0.325	0.58	1.00	0.56
oG	Gasol	3	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.381	0.68	1.00	0.56
oG	Gasol	3	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.560	1.00	1.00	0.56
oG	Gasol	3	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.297	1.00	0.53	0.56
oG	Gasol	3	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
oG	Gasol	3	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oG	Gasol	3	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oG	Gasol	3	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69
oG	Gasol	3	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oG	Gasol	3	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.950	0.95	1.00	1.00
oG	Gasol	3	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oG	Gasol	3	4	Float roof	100	0	0	0	41.3				G	0.530	1.00	0.53	1.00
oG	Gasol	3	5	Pipeline	100	0	0	0	51.2				G	1.000	1.00	1.00	1.00
oG	Gasol	3	6	Float roof	100	0	0	0	61.3	61.4			G	0.530	1.00	0.53	1.00
oG	Gasol	3	7	Truck emissions	100	0	0	0	73.2				G	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oG	Gasol	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		G	1.000	1.00	1.00	1.00
oG	Gasol	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			G	1.000	1.00	1.00	1.00
oG	Gasol	3	8	Distribution spills	100	0	0	0	82.4				G	0.600	1.00	0.60	1.00
oG	Gasol	4	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.560	1.00	1.00	0.56
oG	Gasol	4	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.118	1.00	0.21	0.56
oG	Gasol	4	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.560	1.00	1.00	0.56
oG	Gasol	4	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.297	1.00	0.53	0.56
oG	Gasol	4	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.297	1.00	0.53	0.56
oG	Gasol	4	2	Pipelines SC	100	0	0	0	27.1				o	0.235	0.42	1.00	0.56
oG	Gasol	4	2	Port emissions	100	0	58	42	21.3				o	0.325	0.58	1.00	0.56
oG	Gasol	4	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.381	0.68	1.00	0.56
oG	Gasol	4	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.560	1.00	1.00	0.56
oG	Gasol	4	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.297	1.00	0.53	0.56
oG	Gasol	4	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
oG	Gasol	4	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oG	Gasol	4	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oG	Gasol	4	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69
oG	Gasol	4	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oG	Gasol	4	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.950	0.95	1.00	1.00
oG	Gasol	4	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oG	Gasol	4	4	Float roof	100	0	0	0	41.3				G	0.100	1.00	0.10	1.00
oG	Gasol	4	5	Pipeline	100	0	0	0	51.2				G	1.000	1.00	1.00	1.00
oG	Gasol	4	6	Float roof	100	0	0	0	61.3	61.4			G	0.100	1.00	0.10	1.00
oG	Gasol	4	7	Truck emissions	100	0	0	0	73.2				G	1.000	1.00	1.00	1.00
oG	Gasol	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		G	1.000	1.00	1.00	1.00
oG	Gasol	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			G	0.800	1.00	0.80	1.00
oP	LPG	1	1	Combustion ROW	0	0	450	50	11.1	11.2			o	0.020	1.00	1.00	0.02
oP	LPG	1	1	Combustion SC/CA	100	400	0	0	11.1	11.2			o	0.020	1.00	1.00	0.02
oP	LPG	1	1	Oil field ROW	0	0	450	50	13.1	13.2	14.1		o	0.020	1.00	1.00	0.02
oP	LPG	1	1	Oil field storage,	100	400	0	0	13.1	13.2	14.1		o	0.020	1.00	1.00	0.02
oP	LPG	1	1	Pumps, fugit	100	400	450	50	12.1	12.2			o	0.020	1.00	1.00	0.02
oP	LPG	1	2	Pipelines SC	100	0	0	0	27.1				o	0.010	0.50	1.00	0.02
oP	LPG	1	2	Port emissions	100	0	90	10	21.3				o	0.010	0.50	1.00	0.02
oP	LPG	1	2	Ships, oil transpor	2.6	18	2.03	311	21.4				o	0.010	0.50	1.00	0.02
oP	LPG	1	3	Crude storage ROW	0	0	45	5	35.1	34.2			G	0.020	1.00	1.00	0.02
oP	LPG	1	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.020	1.00	1.00	0.02
oP	LPG	1	3	Electricity	18	25	57	0	32.4				xJ	0.019	1.00	1.00	0.02
oP	LPG	1	3	Natural Gas	100	0	0	0	39.1				n	0.020	1.00	1.00	0.02
oP	LPG	1	3	Natural Gas	0	15	67	18	39.4				n	0.020	1.00	1.00	0.02
oP	LPG	1	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.170	1.00	1.00	0.17
oP	LPG	1	3	Refinery energy	100	0	0	0	31.2				G	0.170	1.00	1.00	0.17
oP	LPG	1	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.000	0.00	1.00	0.00
oP	LPG	1	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.020	1.00	1.00	0.02
oP	LPG	1	4	Pipeline	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oP	LPG	1	5	Transport	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oP	LPG	1	6	Storage	100	0	0	0	61.1				P	1.000	1.00	1.00	1.00
oP	LPG	1	7	Truck emissions	100	0	0	0	73.1				P	1.000	1.00	1.00	1.00
oP	LPG	1	7	Truck fugitives	100	0	0	0	72.1	74.1	72.7		P	1.000	1.00	1.00	1.00
oP	LPG	1	8	Fueling, outage	100	0	0	0	82.4	82.7			P	1.000	1.00	1.00	1.00
oP	LPG	2	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.020	1.00	1.00	0.02
oP	LPG	2	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.004	1.00	0.21	0.02
oP	LPG	2	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.020	1.00	1.00	0.02
oP	LPG	2	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.011	1.00	0.53	0.02
oP	LPG	2	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.011	1.00	0.53	0.02
oP	LPG	2	2	Pipelines SC	100	0	0	0	27.1				o	0.008	0.42	1.00	0.02
oP	LPG	2	2	Port emissions	100	0	58	42	21.3				o	0.012	0.58	1.00	0.02
oP	LPG	2	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.014	0.68	1.00	0.02
oP	LPG	2	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.020	1.00	1.00	0.02
oP	LPG	2	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.011	1.00	0.53	0.02
oP	LPG	2	3	Electricity	22	23	55	0	39.4				xJ	0.020	1.00	1.00	0.02
oP	LPG	2	3	Natural Gas	100	0	0	0	39.2				n	0.020	1.00	1.00	0.02
oP	LPG	2	3	Natural Gas	0	15	67	18	39.4				n	0.020	1.00	1.00	0.02

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oP	LPG	2	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.036	1.00	0.21	0.17
oP	LPG	2	3	Refinery energy	100	0	0	0	31.2				G	0.170	1.00	1.00	0.17
oP	LPG	2	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.000	0.00	1.00	0.00
oP	LPG	2	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.011	1.00	0.53	0.02
oP	LPG	2	4	Pipeline	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oP	LPG	2	5	Transport	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oP	LPG	2	6	Storage	100	0	0	0	61.1				P	1.000	1.00	1.00	1.00
oP	LPG	2	7	Truck emissions	100	0	0	0	73.2				P	1.000	1.00	1.00	1.00
oP	LPG	2	7	Truck fugitives	100	0	0	0	72.1	74.1			P	1.000	1.00	1.00	1.00
oP	LPG	2	8	Fueling	100	0	0	0	82.4				P	1.000	1.00	1.00	1.00
oP	LPG	3	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.020	1.00	1.00	0.02
oP	LPG	3	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.004	1.00	0.21	0.02
oP	LPG	3	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.020	1.00	1.00	0.02
oP	LPG	3	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.011	1.00	0.53	0.02
oP	LPG	3	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.011	1.00	0.53	0.02
oP	LPG	3	2	Pipelines SC	100	0	0	0	27.1				o	0.008	0.42	1.00	0.02
oP	LPG	3	2	Port emissions	100	0	58	42	21.3				o	0.012	0.58	1.00	0.02
oP	LPG	3	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.014	0.68	1.00	0.02
oP	LPG	3	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.020	1.00	1.00	0.02
oP	LPG	3	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.011	1.00	0.53	0.02
oP	LPG	3	3	Electricity	22	23	55	0	39.4				xJ	0.020	1.00	1.00	0.02
oP	LPG	3	3	Natural Gas	100	0	0	0	39.2				n	0.020	1.00	1.00	0.02
oP	LPG	3	3	Natural Gas	0	15	67	18	39.4				n	0.020	1.00	1.00	0.02
oP	LPG	3	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.036	1.00	0.21	0.17
oP	LPG	3	3	Refinery energy	100	0	0	0	31.2				G	0.170	1.00	1.00	0.17
oP	LPG	3	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.000	0.00	1.00	0.00
oP	LPG	3	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.011	1.00	0.53	0.02
oP	LPG	3	4	Pipeline	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oP	LPG	3	5	Transport	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oP	LPG	3	6	Storage	100	0	0	0	61.1				P	1.000	1.00	1.00	1.00
oP	LPG	3	7	Truck emissions	100	0	0	0	73.2				P	1.000	1.00	1.00	1.00
oP	LPG	3	7	Truck fugitives	100	0	0	0	72.1	74.1			P	1.000	1.00	1.00	1.00
oP	LPG	3	8	Fueling	100	0	0	0	82.3				P	1.000	1.00	1.00	1.00
oP	LPG	4	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.020	1.00	1.00	0.02
oP	LPG	4	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.004	1.00	0.21	0.02
oP	LPG	4	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.020	1.00	1.00	0.02
oP	LPG	4	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.011	1.00	0.53	0.02
oP	LPG	4	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.011	1.00	0.53	0.02
oP	LPG	4	2	Pipelines SC	100	0	0	0	27.1				o	0.008	0.42	1.00	0.02
oP	LPG	4	2	Port emissions	100	0	58	42	21.3				o	0.012	0.58	1.00	0.02
oP	LPG	4	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.014	0.68	1.00	0.02
oP	LPG	4	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.020	1.00	1.00	0.02
oP	LPG	4	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.011	1.00	0.53	0.02
oP	LPG	4	3	Electricity	22	23	55	0	39.4				xJ	0.020	1.00	1.00	0.02
oP	LPG	4	3	Natural Gas	100	0	0	0	39.2				n	0.020	1.00	1.00	0.02
oP	LPG	4	3	Natural Gas	0	15	67	18	39.4				n	0.020	1.00	1.00	0.02
oP	LPG	4	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.036	1.00	0.21	0.17
oP	LPG	4	3	Refinery energy	100	0	0	0	31.2				G	0.170	1.00	1.00	0.17
oP	LPG	4	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.000	0.00	1.00	0.00
oP	LPG	4	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.011	1.00	0.53	0.02
oP	LPG	4	4	Pipeline	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oP	LPG	4	5	Transport	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oP	LPG	4	6	Storage	100	0	0	0	61.1				P	1.000	1.00	1.00	1.00
oP	LPG	4	7	Truck emissions	100	0	0	0	73.2				P	1.000	1.00	1.00	1.00
oP	LPG	4	7	Truck fugitives	100	0	0	0	72.1	74.1			P	1.000	1.00	1.00	1.00
oP	LPG	4	8	Fueling	100	0	0	0	82.4				P	1.000	1.00	1.00	1.00
oR	RFG	1	1	Combustion ROW	0	0	450	50	11.1	11.2			o	0.580	1.00	1.00	0.58
oR	RFG	1	1	Combustion SC/CA	100	400	0	0	11.1	11.2			o	0.580	1.00	1.00	0.58
oR	RFG	1	1	Oil field ROW	0	0	450	50	13.1	13.2	14.1		o	0.580	1.00	1.00	0.58
oR	RFG	1	1	Oil field storage,	100	400	0	0	13.1	13.2	14.1		o	0.580	1.00	1.00	0.58
oR	RFG	1	1	Pumps, fugit	100	400	450	50	12.1	12.2			o	0.580	1.00	1.00	0.58
oR	RFG	1	2	Pipelines SC	100	0	0	0	27.1				o	0.290	0.50	1.00	0.58

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oR	RFG	1	2	Port emissions	100	0	90	10	21.3				o	0.290	0.50	1.00	0.58
oR	RFG	1	2	Ships, oil transpor	2.6	18	2.03	311	21.4				o	0.290	0.50	1.00	0.58
oR	RFG	1	3	Crude storage ROW	0	0	45	5	35.1	34.2			G	0.557	0.96	1.00	0.58
oR	RFG	1	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.557	0.96	1.00	0.58
oR	RFG	1	3	Electricity	18	25	57	0	32.4				xJ	0.750	1.00	1.00	0.75
oR	RFG	1	3	Methanol, non SC	0	3	2	95	39.4				nM	0.040	1.00	1.00	0.04
oR	RFG	1	3	Methanol, SC	100	0	0	0	39.1				nM	0.040	1.00	1.00	0.04
oR	RFG	1	3	Natural Gas	100	0	0	0	39.1				n	0.060	1.00	1.00	0.06
oR	RFG	1	3	Natural Gas	0	15	67	18	39.4				n	0.060	1.00	1.00	0.06
oR	RFG	1	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.690	1.00	1.00	0.69
oR	RFG	1	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oR	RFG	1	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.600	0.60	1.00	1.00
oR	RFG	1	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.690	1.00	1.00	0.69
oR	RFG	1	4	Float roof	100	0	0	0	41.3				R	1.000	1.00	1.00	1.00
oR	RFG	1	5	Pipeline	100	0	0	0	51.2				R	1.000	1.00	1.00	1.00
oR	RFG	1	6	Float roof	100	0	0	0	61.3	61.4			R	1.000	1.00	1.00	1.00
oR	RFG	1	7	Truck emissions	100	0	0	0	73.1				R	1.000	1.00	1.00	1.00
oR	RFG	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		R	1.000	1.00	1.00	1.00
oR	RFG	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			R	1.000	1.00	1.00	1.00
oR	RFG	1	8	Distribution spills	100	0	0	0	82.4				R	1.000	1.00	1.00	1.00
oR	RFG	2	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.580	1.00	1.00	0.58
oR	RFG	2	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.122	1.00	0.21	0.58
oR	RFG	2	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.580	1.00	1.00	0.58
oR	RFG	2	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.307	1.00	0.53	0.58
oR	RFG	2	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.307	1.00	0.53	0.58
oR	RFG	2	2	Pipelines SC	100	0	0	0	27.1				o	0.244	0.42	1.00	0.58
oR	RFG	2	2	Port emissions	100	0	58	42	21.3				o	0.336	0.58	1.00	0.58
oR	RFG	2	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.394	0.68	1.00	0.58
oR	RFG	2	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.557	0.96	1.00	0.58
oR	RFG	2	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.295	0.96	0.53	0.58
oR	RFG	2	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
oR	RFG	2	3	Methanol, non SC	0	3	2	95	39.4				nM	0.040	1.00	1.00	0.04
oR	RFG	2	3	Methanol, SC	100	0	0	0	39.2				nM	0.040	1.00	1.00	0.04
oR	RFG	2	3	Natural Gas	100	0	0	0	39.2				n	0.060	1.00	1.00	0.06
oR	RFG	2	3	Natural Gas	0	15	67	18	39.4				n	0.060	1.00	1.00	0.06
oR	RFG	2	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69
oR	RFG	2	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oR	RFG	2	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.600	0.60	1.00	1.00
oR	RFG	2	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oR	RFG	2	4	Float roof	100	0	0	0	41.3				R	0.530	1.00	0.53	1.00
oR	RFG	2	5	Pipeline	100	0	0	0	51.2				R	1.000	1.00	1.00	1.00
oR	RFG	2	6	Float roof	100	0	0	0	61.3	61.4			R	0.530	1.00	0.53	1.00
oR	RFG	2	7	Truck emissions	100	0	0	0	73.2				R	1.000	1.00	1.00	1.00
oR	RFG	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		R	1.000	1.00	1.00	1.00
oR	RFG	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			R	1.000	1.00	1.00	1.00
oR	RFG	2	8	Distribution spills	100	0	0	0	82.4				R	1.000	1.00	1.00	1.00
oR	RFG	3	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.580	1.00	1.00	0.58
oR	RFG	3	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.122	1.00	0.21	0.58
oR	RFG	3	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.580	1.00	1.00	0.58
oR	RFG	3	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.307	1.00	0.53	0.58
oR	RFG	3	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.307	1.00	0.53	0.58
oR	RFG	3	2	Pipelines SC	100	0	0	0	27.1				o	0.244	0.42	1.00	0.58
oR	RFG	3	2	Port emissions	100	0	58	42	21.3				o	0.336	0.58	1.00	0.58
oR	RFG	3	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.394	0.68	1.00	0.58
oR	RFG	3	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.557	0.96	1.00	0.58
oR	RFG	3	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.295	0.96	0.53	0.58
oR	RFG	3	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
oR	RFG	3	3	Methanol, non SC	0	3	2	95	39.4				nM	0.040	1.00	1.00	0.04
oR	RFG	3	3	Methanol, SC	100	0	0	0	39.2				nM	0.040	1.00	1.00	0.04
oR	RFG	3	3	Natural Gas, SC	100	0	0	0	39.2				n	0.060	1.00	1.00	0.06
oR	RFG	3	3	Natural Gas, non SC	0	15	67	18	39.4				n	0.060	1.00	1.00	0.06
oR	RFG	3	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oR	RFG	3	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oR	RFG	3	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.600	0.60	1.00	1.00
oR	RFG	3	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oR	RFG	3	4	Float roof	100	0	0	0	41.3				R	0.530	1.00	0.53	1.00
oR	RFG	3	5	Pipeline	100	0	0	0	51.2				R	1.000	1.00	1.00	1.00
oR	RFG	3	6	Float roof	100	0	0	0	61.3	61.4			R	0.530	1.00	0.53	1.00
oR	RFG	3	7	Truck emissions	100	0	0	0	73.2				R	1.000	1.00	1.00	1.00
oR	RFG	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		R	1.000	1.00	1.00	1.00
oR	RFG	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			R	1.000	1.00	1.00	1.00
oR	RFG	3	8	Distribution spills	100	0	0	0	82.4				R	0.600	1.00	0.60	1.00
oR	RFG	4	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.580	1.00	1.00	0.58
oR	RFG	4	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.122	1.00	0.21	0.58
oR	RFG	4	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.580	1.00	1.00	0.58
oR	RFG	4	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.307	1.00	0.53	0.58
oR	RFG	4	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.307	1.00	0.53	0.58
oR	RFG	4	2	Pipelines SC	100	0	0	0	27.1				o	0.244	0.42	1.00	0.58
oR	RFG	4	2	Port emissions	100	0	58	42	21.3				o	0.336	0.58	1.00	0.58
oR	RFG	4	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.394	0.68	1.00	0.58
oR	RFG	4	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.557	0.96	1.00	0.58
oR	RFG	4	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.111	0.96	0.20	0.58
oR	RFG	4	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
oR	RFG	4	3	Methanol, SC	100	0	0	0	39.2				nM	0.040	1.00	1.00	0.04
oR	RFG	4	3	Methanol, non SC	0	3	2	95	39.4				nM	0.040	1.00	1.00	0.04
oR	RFG	4	3	Natural Gas	100	0	0	0	39.2				n	0.060	1.00	1.00	0.06
oR	RFG	4	3	Natural Gas	0	15	67	18	39.4				n	0.060	1.00	1.00	0.06
oR	RFG	4	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69
oR	RFG	4	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oR	RFG	4	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.600	0.60	1.00	1.00
oR	RFG	4	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oR	RFG	4	4	Float roof	100	0	0	0	41.3				R	0.100	1.00	0.10	1.00
oR	RFG	4	5	Pipeline	100	0	0	0	51.2				R	1.000	1.00	1.00	1.00
oR	RFG	4	6	Float roof	100	0	0	0	61.3	61.4			R	0.100	1.00	0.10	1.00
oR	RFG	4	7	Truck emissions	100	0	0	0	73.2				R	1.000	1.00	1.00	1.00
oR	RFG	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		R	1.000	1.00	1.00	1.00
oR	RFG	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			R	0.800	1.00	0.80	1.00
oR	RFG	4	8	Distribution spills	100	0	0	0	82.4				R	0.440	1.00	0.44	1.00
xJ	Elec	1	1	Included	0	0	0	0	19.9				xJ	0.000	1.00	1.00	0.00
xJ	Elec	1	2	Coal production	0	0	100	0	39.1				c	0.099	0.11	1.00	0.90
xJ	Elec	1	2	Biomass production	0	100	0	0	39.4				b	0.055	0.05	1.00	1.10
xJ	Elec	1	2	NG production SC	100	0	0	0	39.1				n	0.162	0.18	1.00	0.90
xJ	Elec	1	2	NG production non S	0	15	67	18	39.4				n	0.504	0.56	1.00	0.90
xJ	Elec	1	2	Non-fossil power	0	0	0	0	19.9				xJ	0.000	0.21	1.00	0.00
xJ	Elec	1	3	Ave power 2000 CA	0	25.2	0	0	32.2				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	3	Ave power 2000 SC	17.6	0	0	0	32.1				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	3	Ave power 2000 US	0	0	57.2	0	32.3				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	4	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	5	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	6	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	7	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	8	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	1	Included	0	0	0	0	19.9				xJ	0.000	1.00	1.00	0.00
xJ	Elec	2	2	Coal production	0	0	100	0	39.1				c	0.099	0.11	1.00	0.90
xJ	Elec	2	2	Biomass production	0	100	0	0	39.4				b	0.000	0.00	1.00	1.10
xJ	Elec	2	2	NG production SC	100	0	0	0	39.2				n	0.441	0.49	1.00	0.90
xJ	Elec	2	2	NG production non S	0	15	67	18	39.4				n	0.270	0.30	1.00	0.90
xJ	Elec	2	2	Non-fossil power	0	0	0	0	19.9				xJ	0.189	0.21	1.00	0.90
xJ	Elec	2	3	80/20 power 2010 CA	0	21.7	0	0	35.2				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	3	80/20 power 2010 SC	49	0	0	0	35.1				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	3	80/20 power 2010 US	0	0	29.3	0	35.3				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	4	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	5	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	6	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
xJ	Elec	2	7	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	8	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	1	Included	0	0	0	0	19.9				xJ	0.000	1.00	1.00	0.00
xJ	Elec	3	2	Coal production	0	0	100	0	39.1				c	0.099	0.11	1.00	0.90
xJ	Elec	3	2	Biomass production	0	100	0	0	39.4				b	0.000	0.00	1.00	1.10
xJ	Elec	3	2	NG production SC	100	0	0	0	39.2				n	0.522	0.58	1.00	0.90
xJ	Elec	3	2	NG production non S	0	15	67	18	39.4				n	0.189	0.21	1.00	0.90
xJ	Elec	3	2	Non-fossil power	0	0	0	0	19.9				xJ	0.189	0.21	1.00	0.90
xJ	Elec	3	3	95/5 power 2010 CA	0	17.9	0	0	36.2				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	3	95/5 power 2010 SC	57.7	0	0	0	36.1				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	3	95/5 power 2010 US	0	0	24.4	0	36.3				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	4	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	5	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	6	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	7	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	8	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	1	Included	0	0	0	0	19.9				xJ	0.000	1.00	1.00	0.00
xJ	Elec	4	2	Coal production	0	0	100	0	39.1				c	0.099	0.11	1.00	0.90
xJ	Elec	4	2	Biomass production	0	100	0	0	39.4				b	0.000	0.00	1.00	1.10
xJ	Elec	4	2	NG production SC	100	0	0	0	39.2				n	0.522	0.58	1.00	0.90
xJ	Elec	4	2	NG production non S	0	15	67	18	39.4				n	0.189	0.21	1.00	0.90
xJ	Elec	4	2	Non-fossil power	0	0	0	0	19.9				xJ	0.189	0.21	1.00	0.90
xJ	Elec	4	3	95/5 power 2010 CA	0	17.9	0	0	36.2				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	3	95/5 power 2010 SC	57.7	0	0	0	36.1				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	3	95/5 power 2010 US	0	0	24.4	0	36.3				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	4	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	5	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	6	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	7	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	8	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
bE	E85	1	1	Diesel Equip	100	0	0	0	11.1	12.1			b	0.000	0.83	0.00	0.00
bN	M85	1	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.417	0.87	1.00	0.48
bE	E85	2	1	Diesel Equip	0	0	100	0	11.1	12.1			b	0.538	0.83	1.00	0.65
bN	M85	2	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.341	0.87	1.00	0.39
bE	E85	3	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.578	0.83	1.00	0.70
bN	M85	3	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.341	0.87	1.00	0.39
nH	H2	3	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.397	1.01	1.00	0.39
bE	E85	4	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.578	0.83	1.00	0.70
bN	M85	4	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.272	0.87	1.00	0.31
nH	H2	4	1	Diesel Equip	0	100	0	0	11.1	12.1			b	0.397	1.01	1.00	0.39
bE	E85	1	1	Gasoline Equip	100	0	0	0	13.1	14.1			b	0.000	0.83	0.00	0.00
bN	M85	1	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.043	0.87	1.00	0.05
bE	E85	2	1	Gasoline Equip	0	0	100	0	13.1	14.1			b	0.236	0.83	1.00	0.28
bN	M85	2	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.038	0.87	1.00	0.04
bE	E85	3	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.065	0.83	1.00	0.08
bN	M85	3	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.038	0.87	1.00	0.04
nH	H2	3	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.044	1.01	1.00	0.04
bE	E85	4	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.065	0.83	1.00	0.08
bN	M85	4	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.038	0.87	1.00	0.04
nH	H2	4	1	Gasoline Equip	0	100	0	0	13.1	14.1			b	0.044	1.01	1.00	0.04
nC	CNG	1	1	Production	20	0	60	20	11.2				n	1.000	1.00	1.00	1.00
nL	LNG	1	1	Production	0	0	100	0	11.2	53.1	31.1		n	1.100	1.00	1.00	1.10
nM	M100	1	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.941	1.00	1.00	0.94
nN	M85	1	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.817	0.87	1.00	0.94
nC	CNG	2	1	Production	0	0	50	50	11.2				n	1.000	1.00	1.00	1.00
nH	H2	2	1	Production	0	0	50	50	11.2	53.1	31.1		n	1.000	1.01	1.00	0.99
nL	LNG	2	1	Production	0	0	50	50	11.2	53.1	31.1		n	1.100	1.00	1.00	1.10
nM	M100	2	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.896	1.00	1.00	0.90
nN	M85	2	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.778	0.87	1.00	0.90
nC	CNG	3	1	Production	0	0	50	50	11.2				n	1.000	1.00	1.00	1.00
nL	LNG	3	1	Production	0	0	50	50	11.2	53.1	31.1		n	1.050	1.00	1.00	1.05
nM	M100	3	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.896	1.00	1.00	0.90
nN	M85	3	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.778	0.87	1.00	0.90
nC	CNG	4	1	Production	0	0	50	50	11.2				n	1.000	1.00	1.00	1.00
nL	LNG	4	1	Production	0	0	50	50	11.2	53.1	31.1		n	1.050	1.00	1.00	1.05
nM	M100	4	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.896	1.00	1.00	0.90
nN	M85	4	1	Production	0	0	0	100	11.2	53.1	31.1		n	0.778	0.87	1.00	0.90
oD	Diese	1	1	Combustion ROW	0	0	450	50	11.1	11.2			o	0.250	1.00	1.00	0.25
oP	LPG	1	1	Combustion ROW	0	0	450	50	11.1	11.2			o	0.020	1.00	1.00	0.02
oR	RFG	1	1	Combustion ROW	0	0	450	50	11.1	11.2			o	0.580	1.00	1.00	0.58
oD	Diese	2	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.250	1.00	1.00	0.25
oG	Gasol	2	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.560	1.00	1.00	0.56
oP	LPG	2	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.020	1.00	1.00	0.02
oR	RFG	2	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.580	1.00	1.00	0.58
oD	Diese	3	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.250	1.00	1.00	0.25
oG	Gasol	3	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.560	1.00	1.00	0.56
oP	LPG	3	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.020	1.00	1.00	0.02
oR	RFG	3	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.580	1.00	1.00	0.58
oD	Diese	4	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.250	1.00	1.00	0.25
oG	Gasol	4	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.560	1.00	1.00	0.56
oP	LPG	4	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.020	1.00	1.00	0.02
oR	RFG	4	1	Combustion ROW	0	0	340	240	11.1	11.2			o	0.580	1.00	1.00	0.58
oD	Diese	1	1	Combustion SC/CA	100	400	0	0	11.1	11.2			o	0.250	1.00	1.00	0.25
oG	Gasol	1	1	Combustion SC/CA	100	400	0	0	11.1	11.2			o	0.560	1.00	1.00	0.56
oP	LPG	1	1	Combustion SC/CA	100	400	0	0	11.1	11.2			o	0.020	1.00	1.00	0.02
oR	RFG	1	1	Combustion SC/CA	100	400	0	0	11.1	11.2			o	0.580	1.00	1.00	0.58
oD	Diese	2	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.053	1.00	0.21	0.25
oG	Gasol	2	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.118	1.00	0.21	0.56
oP	LPG	2	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.004	1.00	0.21	0.02
oR	RFG	2	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.122	1.00	0.21	0.58
oD	Diese	3	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.053	1.00	0.21	0.25
oG	Gasol	3	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.118	1.00	0.21	0.56

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oP	LPG	3	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.004	1.00	0.21	0.02
oR	RFG	3	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.122	1.00	0.21	0.58
oD	Diese	4	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.053	1.00	0.21	0.25
oG	Gasol	4	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.118	1.00	0.21	0.56
oP	LPG	4	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.004	1.00	0.21	0.02
oR	RFG	4	1	Combustion SC/CA	100	320	0	0	11.1	11.2			o	0.122	1.00	0.21	0.58
oG	Gasol	1	1	Combustion US/ROW	0	0	450	50	11.1	11.2			o	0.560	1.00	1.00	0.56
oD	Diese	1	1	Oil field ROW	0	0	450	50	13.1	13.2	14.1		o	0.250	1.00	1.00	0.25
oG	Gasol	1	1	Oil field ROW	0	0	450	50	13.1	13.2	14.1		o	0.560	1.00	1.00	0.56
oP	LPG	1	1	Oil field ROW	0	0	450	50	13.1	13.2	14.1		o	0.020	1.00	1.00	0.02
oR	RFG	1	1	Oil field ROW	0	0	450	50	13.1	13.2	14.1		o	0.580	1.00	1.00	0.58
oD	Diese	2	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.250	1.00	1.00	0.25
oG	Gasol	2	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.560	1.00	1.00	0.56
oP	LPG	2	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.020	1.00	1.00	0.02
oR	RFG	2	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.580	1.00	1.00	0.58
oD	Diese	3	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.250	1.00	1.00	0.25
oG	Gasol	3	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.560	1.00	1.00	0.56
oP	LPG	3	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.020	1.00	1.00	0.02
oR	RFG	3	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.580	1.00	1.00	0.58
oD	Diese	4	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.250	1.00	1.00	0.25
oG	Gasol	4	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.560	1.00	1.00	0.56
oP	LPG	4	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.020	1.00	1.00	0.02
oR	RFG	4	1	Oil field ROW	0	0	340	240	13.1	13.2	14.1		o	0.580	1.00	1.00	0.58
oD	Diese	1	1	Oil field storage,	100	400	0	0	13.1	13.2	14.1		o	0.250	1.00	1.00	0.25
oG	Gasol	1	1	Oil field storage,	100	400	0	0	13.1	13.2	14.1		o	0.560	1.00	1.00	0.56
oP	LPG	1	1	Oil field storage,	100	400	0	0	13.1	13.2	14.1		o	0.020	1.00	1.00	0.02
oR	RFG	1	1	Oil field storage,	100	400	0	0	13.1	13.2	14.1		o	0.580	1.00	1.00	0.58
oD	Diese	2	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.133	1.00	0.53	0.25
oG	Gasol	2	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.297	1.00	0.53	0.56
oP	LPG	2	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.011	1.00	0.53	0.02
oR	RFG	2	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.307	1.00	0.53	0.58
oD	Diese	3	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.133	1.00	0.53	0.25
oG	Gasol	3	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.297	1.00	0.53	0.56
oP	LPG	3	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.011	1.00	0.53	0.02
oR	RFG	3	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.307	1.00	0.53	0.58
oD	Diese	4	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.133	1.00	0.53	0.25
oG	Gasol	4	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.297	1.00	0.53	0.56
oP	LPG	4	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.011	1.00	0.53	0.02
oR	RFG	4	1	Oil field storage,	100	320	0	0	13.1	13.2	14.1		o	0.307	1.00	0.53	0.58
oD	Diese	2	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.133	1.00	0.53	0.25
oG	Gasol	2	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.297	1.00	0.53	0.56
oP	LPG	2	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.011	1.00	0.53	0.02
oR	RFG	2	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.307	1.00	0.53	0.58
oD	Diese	3	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.133	1.00	0.53	0.25
oG	Gasol	3	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.297	1.00	0.53	0.56
oP	LPG	3	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.011	1.00	0.53	0.02
oR	RFG	3	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.307	1.00	0.53	0.58
oD	Diese	4	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.133	1.00	0.53	0.25
oG	Gasol	4	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.297	1.00	0.53	0.56
oP	LPG	4	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.011	1.00	0.53	0.02
oR	RFG	4	1	Pumps, fugit	100	320	340	240	12.1	12.2			o	0.307	1.00	0.53	0.58
oD	Diese	1	1	Pumps, fugit	100	400	450	50	12.1	12.2			o	0.250	1.00	1.00	0.25
oG	Gasol	1	1	Pumps, fugit	100	400	450	50	12.1	12.2			o	0.560	1.00	1.00	0.56
oP	LPG	1	1	Pumps, fugit	100	400	450	50	12.1	12.2			o	0.020	1.00	1.00	0.02
oR	RFG	1	1	Pumps, fugit	100	400	450	50	12.1	12.2			o	0.580	1.00	1.00	0.58
bE	E85	1	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.83	0.00	0.00
bN	M85	1	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.87	1.00	0.00
bE	E85	2	1	Propane burner	0	0	100	0	18.1				xB	0.116	0.83	1.00	0.14
bN	M85	2	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.87	1.00	0.00
bE	E85	3	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.83	1.00	0.00
bN	M85	3	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.87	1.00	0.00
nH	H2	3	1	Propane burner	0	100	0	0	18.1				xB	0.000	1.01	1.00	0.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
bE	E85	4	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.83	1.00	0.00
bN	M85	4	1	Propane burner	0	100	0	0	18.1				xB	0.000	0.87	1.00	0.00
nH	H2	4	1	Propane burner	0	100	0	0	18.1				xB	0.000	1.01	1.00	0.00
bE	E85	1	1	Fertilizer	0	100	0	0	18.2				xB	0.000	0.83	0.00	0.00
bN	M85	1	1	Fertilizer	0	100	0	0	18.2				xB	0.043	0.87	1.00	0.05
bE	E85	2	1	Fertilizer	0	0	100	0	18.2				xB	0.465	0.83	1.00	0.56
bN	M85	2	1	Fertilizer	0	100	0	0	18.2				xB	0.039	0.87	1.00	0.05
bE	E85	3	1	Fertilizer	0	100	0	0	18.2				xB	0.066	0.83	1.00	0.08
bN	M85	3	1	Fertilizer	0	100	0	0	18.2				xB	0.039	0.87	1.00	0.05
nH	H2	3	1	Fertilizer	0	100	0	0	18.2				xB	0.045	1.01	1.00	0.05
bE	E85	4	1	Fertilizer	0	100	0	0	18.2				xB	0.066	0.83	1.00	0.08
bN	M85	4	1	Fertilizer	0	100	0	0	18.2				xB	0.039	0.87	1.00	0.05
nH	H2	4	1	Fertilizer	0	100	0	0	18.2				xB	0.045	1.01	1.00	0.05
nH	H2	1	1	Solar	0	0	0	100	19.9				xJ	0.000	1.00	0.00	0.00
bE	E85	1	1	Electricity	18	25	57	0	32.4				xJ	0.000	0.83	0.00	0.00
bN	M85	1	1	Electricity	0	45	55	0	32.4				xJ	0.043	0.87	1.00	0.05
bE	E85	2	1	Electricity	0	0	100	0	35.3				xJ	0.000	0.83	1.00	0.00
bN	M85	2	1	Electricity	0	45	55	0	39.4				xJ	0.023	0.87	1.00	0.03
bE	E85	3	1	Electricity	0	45	55	0	39.4				xJ	0.058	0.83	1.00	0.07
bN	M85	3	1	Electricity	0	45	55	0	39.4				xJ	0.023	0.87	1.00	0.03
nH	H2	3	1	Electricity	0	45	55	0	39.4				xJ	0.026	1.01	1.00	0.03
bE	E85	4	1	Electricity	0	45	55	0	39.4				xJ	0.058	0.83	1.00	0.07
bN	M85	4	1	Electricity	0	45	55	0	39.4				xJ	0.023	0.87	1.00	0.03
nH	H2	4	1	Electricity	0	45	55	0	39.4				xJ	0.026	1.01	1.00	0.03
bE	E85	1	2	Diesel Truck	100	0	0	0	21.1				b	0.000	0.83	0.00	0.00
bN	M85	1	2	Diesel Truck	0	100	0	0	21.1				b	0.052	0.87	1.00	0.06
bE	E85	2	2	Diesel Truck	0	0	100	0	21.2				b	0.133	0.83	1.00	0.16
bN	M85	2	2	Diesel Truck	0	100	0	0	21.2				b	0.049	0.87	1.00	0.06
bE	E85	3	2	Diesel Truck	0	100	0	0	21.2				b	0.066	0.83	1.00	0.08
bN	M85	3	2	Diesel Truck	0	100	0	0	21.2				b	0.049	0.87	1.00	0.06
nH	H2	3	2	Diesel Truck	0	100	0	0	21.2				b	0.057	1.01	1.00	0.06
bE	E85	4	2	Diesel Truck	0	100	0	0	21.2				b	0.066	0.83	1.00	0.08
bN	M85	4	2	Diesel Truck	0	100	0	0	21.2				b	0.049	0.87	1.00	0.06
nH	H2	4	2	Diesel Truck	0	100	0	0	21.2				b	0.057	1.01	1.00	0.06
nM	M100	1	2	G.T.s US 1990	0	0	0	20	52.3				n	0.471	0.50	1.00	0.94
nN	M85	1	2	G.T.s US 1990	0	0	0	20	52.3				n	0.408	0.43	1.00	0.94
nM	M100	2	2	G.T.s US 1990	0	0	0	20	52.3				n	0.448	0.50	1.00	0.90
nN	M85	2	2	G.T.s US 1990	0	0	0	20	52.3				n	0.389	0.43	1.00	0.90
nM	M100	3	2	G.T.s US 1990	0	0	0	20	52.3				n	0.448	0.50	1.00	0.90
nN	M85	3	2	G.T.s US 1990	0	0	0	20	52.3				n	0.389	0.43	1.00	0.90
nM	M100	4	2	G.T.s US 1990	0	0	0	20	52.3				n	0.448	0.50	1.00	0.90
nN	M85	4	2	G.T.s US 1990	0	0	0	20	52.3				n	0.389	0.43	1.00	0.90
nL	LNG	1	2	G.T.s US 2010	0	0	20	0	52.3				n	0.550	0.50	1.00	1.10
nL	LNG	2	2	G.T.s US 2010	0	23	97	10	52.4				n	0.000	0.00	1.00	1.10
nL	LNG	3	2	G.T.s US 2010	0	23	97	10	52.4				n	0.000	0.00	1.00	1.05
nL	LNG	4	2	G.T.s US 2010	0	23	97	10	52.4				n	0.525	0.50	1.00	1.05
nC	CNG	1	2	Incl in production	20	0	60	20	23.1				n	0.000	1.00	0.00	1.00
nC	CNG	2	2	Incl in production	0	0	50	50	23.1				n	1.000	1.00	1.00	1.00
nC	CNG	3	2	Incl in production	0	0	50	50	23.1				n	1.000	1.00	1.00	1.00
nC	CNG	4	2	Incl in production	0	0	50	50	23.1				n	1.000	1.00	1.00	1.00
nL	LNG	1	2	Recips US 1990	0	0	20	0	51.3				n	0.550	0.50	1.00	1.10
nM	M100	1	2	Recips US 1990	0	0	0	20	51.3				n	0.471	0.50	1.00	0.94
nN	M85	1	2	Recips US 1990	0	0	0	20	51.3				n	0.408	0.43	1.00	0.94
nH	H2	2	2	Recips US 1990	0	23	97	10	51.3				n	1.000	1.01	1.00	0.99
nM	M100	2	2	Recips US 1990	0	0	0	20	51.3				n	0.448	0.50	1.00	0.90
nN	M85	2	2	Recips US 1990	0	0	0	20	51.3				n	0.389	0.43	1.00	0.90
nM	M100	3	2	Recips US 1990	0	0	0	20	51.3				n	0.448	0.50	1.00	0.90
nN	M85	3	2	Recips US 1990	0	0	0	20	51.3				n	0.389	0.43	1.00	0.90
nM	M100	4	2	Recips US 1990	0	0	0	20	51.3				n	0.448	0.50	1.00	0.90
nN	M85	4	2	Recips US 1990	0	0	0	20	51.3				n	0.389	0.43	1.00	0.90
nL	LNG	2	2	Recips US 2010	0	23	97	10	51.4				n	0.550	0.50	1.00	1.10
nL	LNG	3	2	Recips US 2010	0	23	97	10	51.4				n	0.525	0.50	1.00	1.05

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
nL	LNG	4	2	Recips US 2010	0	23	97	10	51.4				n	0.525	0.50	1.00	1.05
oD	Diese	1	2	Port emissions	100	0	90	10	21.3				o	0.125	0.50	1.00	0.25
oG	Gasol	1	2	Port emissions	100	0	90	10	21.3				o	0.280	0.50	1.00	0.56
oP	LPG	1	2	Port emissions	100	0	90	10	21.3				o	0.010	0.50	1.00	0.02
oR	RFG	1	2	Port emissions	100	0	90	10	21.3				o	0.290	0.50	1.00	0.58
oD	Diese	2	2	Port emissions	100	0	58	42	21.3				o	0.145	0.58	1.00	0.25
oG	Gasol	2	2	Port emissions	100	0	58	42	21.3				o	0.325	0.58	1.00	0.56
oP	LPG	2	2	Port emissions	100	0	58	42	21.3				o	0.012	0.58	1.00	0.02
oR	RFG	2	2	Port emissions	100	0	58	42	21.3				o	0.336	0.58	1.00	0.58
oD	Diese	3	2	Port emissions	100	0	58	42	21.3				o	0.145	0.58	1.00	0.25
oG	Gasol	3	2	Port emissions	100	0	58	42	21.3				o	0.325	0.58	1.00	0.56
oP	LPG	3	2	Port emissions	100	0	58	42	21.3				o	0.012	0.58	1.00	0.02
oR	RFG	3	2	Port emissions	100	0	58	42	21.3				o	0.336	0.58	1.00	0.58
oD	Diese	4	2	Port emissions	100	0	58	42	21.3				o	0.145	0.58	1.00	0.25
oG	Gasol	4	2	Port emissions	100	0	58	42	21.3				o	0.325	0.58	1.00	0.56
oP	LPG	4	2	Port emissions	100	0	58	42	21.3				o	0.012	0.58	1.00	0.02
oR	RFG	4	2	Port emissions	100	0	58	42	21.3				o	0.336	0.58	1.00	0.58
oD	Diese	1	2	Ships, oil transpor	2.6	18	2.03	311	21.4				o	0.125	0.50	1.00	0.25
oG	Gasol	1	2	Ships, oil transpor	2.6	18	2.03	311	21.4				o	0.280	0.50	1.00	0.56
oP	LPG	1	2	Ships, oil transpor	2.6	18	2.03	311	21.4				o	0.010	0.50	1.00	0.02
oR	RFG	1	2	Ships, oil transpor	2.6	18	2.03	311	21.4				o	0.290	0.50	1.00	0.58
oD	Diese	2	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.170	0.68	1.00	0.25
oG	Gasol	2	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.381	0.68	1.00	0.56
oP	LPG	2	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.014	0.68	1.00	0.02
oR	RFG	2	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.394	0.68	1.00	0.58
oD	Diese	3	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.170	0.68	1.00	0.25
oG	Gasol	3	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.381	0.68	1.00	0.56
oP	LPG	3	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.014	0.68	1.00	0.02
oR	RFG	3	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.394	0.68	1.00	0.58
oD	Diese	4	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.170	0.68	1.00	0.25
oG	Gasol	4	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.381	0.68	1.00	0.56
oP	LPG	4	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.014	0.68	1.00	0.02
oR	RFG	4	2	Ships, oil transpor	2.6	12	2	750	21.4				o	0.394	0.68	1.00	0.58
oD	Diese	1	2	Pipelines SC	100	0	0	0	27.1				o	0.125	0.50	1.00	0.25
oG	Gasol	1	2	Pipelines SC	100	0	0	0	27.1				o	0.280	0.50	1.00	0.56
oP	LPG	1	2	Pipelines SC	100	0	0	0	27.1				o	0.010	0.50	1.00	0.02
oR	RFG	1	2	Pipelines SC	100	0	0	0	27.1				o	0.290	0.50	1.00	0.58
oD	Diese	2	2	Pipelines SC	100	0	0	0	27.1				o	0.105	0.42	1.00	0.25
oG	Gasol	2	2	Pipelines SC	100	0	0	0	27.1				o	0.235	0.42	1.00	0.56
oP	LPG	2	2	Pipelines SC	100	0	0	0	27.1				o	0.008	0.42	1.00	0.02
oR	RFG	2	2	Pipelines SC	100	0	0	0	27.1				o	0.244	0.42	1.00	0.58
oD	Diese	3	2	Pipelines SC	100	0	0	0	27.1				o	0.105	0.42	1.00	0.25
oG	Gasol	3	2	Pipelines SC	100	0	0	0	27.1				o	0.235	0.42	1.00	0.56
oP	LPG	3	2	Pipelines SC	100	0	0	0	27.1				o	0.008	0.42	1.00	0.02
oR	RFG	3	2	Pipelines SC	100	0	0	0	27.1				o	0.244	0.42	1.00	0.58
oD	Diese	4	2	Pipelines SC	100	0	0	0	27.1				o	0.105	0.42	1.00	0.25
oG	Gasol	4	2	Pipelines SC	100	0	0	0	27.1				o	0.235	0.42	1.00	0.56
oP	LPG	4	2	Pipelines SC	100	0	0	0	27.1				o	0.008	0.42	1.00	0.02
oR	RFG	4	2	Pipelines SC	100	0	0	0	27.1				o	0.244	0.42	1.00	0.58
nH	H2	1	2	Solar	0	0	0	100	19.9				xJ	0.000	1.00	0.00	0.00
nH	H2	1	2	Solar	0	0	0	100	19.9				xJ	0.000	1.00	0.00	0.00
bN	M85	1	3	IGT gasifier	0	100	0	0	35.1				bM	0.868	0.87	1.00	1.00
bN	M85	2	3	Adv. gasifier	0	100	0	0	35.2				bM	0.868	0.87	1.00	1.00
bN	M85	3	3	Adv. gasifier	0	100	0	0	35.2				bM	0.868	0.87	1.00	1.00
bN	M85	4	3	Adv. gasifier	0	100	0	0	35.2				bM	0.868	0.87	1.00	1.00
bE	E85	1	3	Vents fugitives	100	0	0	0	33.1	34.1	35.1		E	0.830	0.83	1.00	1.00
bE	E85	2	3	Vents fugitives	0	0	100	0	33.1	34.1	35.1		E	0.830	0.83	1.00	1.00
bE	E85	3	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		E	0.440	0.83	0.53	1.00
bE	E85	4	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		E	0.083	0.83	0.10	1.00
oD	Diese	1	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.480	1.00	1.00	0.48
oD	Diese	2	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.101	1.00	0.21	0.48
oD	Diese	3	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.101	1.00	0.21	0.48

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oD	Diese	4	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.101	1.00	0.21	0.48
oG	Gasol	1	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.690	1.00	1.00	0.69
oG	Gasol	2	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69
oG	Gasol	3	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69
oG	Gasol	4	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69
oP	LPG	1	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.170	1.00	1.00	0.17
oP	LPG	2	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.036	1.00	0.21	0.17
oP	LPG	3	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.036	1.00	0.21	0.17
oP	LPG	4	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.036	1.00	0.21	0.17
oR	RFG	1	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.690	1.00	1.00	0.69
oR	RFG	2	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69
oR	RFG	3	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69
oR	RFG	4	3	Refinery combustion	100	0	0	0	31.1	31.3			G	0.145	1.00	0.21	0.69
oD	Diese	1	3	Refinery energy	100	0	0	0	31.2				G	0.480	1.00	1.00	0.48
oD	Diese	2	3	Refinery energy	100	0	0	0	31.2				G	0.480	1.00	1.00	0.48
oD	Diese	3	3	Refinery energy	100	0	0	0	31.2				G	0.480	1.00	1.00	0.48
oD	Diese	4	3	Refinery energy	100	0	0	0	31.2				G	0.480	1.00	1.00	0.48
oG	Gasol	1	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oG	Gasol	2	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oG	Gasol	3	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oG	Gasol	4	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oP	LPG	1	3	Refinery energy	100	0	0	0	31.2				G	0.170	1.00	1.00	0.17
oP	LPG	2	3	Refinery energy	100	0	0	0	31.2				G	0.170	1.00	1.00	0.17
oP	LPG	3	3	Refinery energy	100	0	0	0	31.2				G	0.170	1.00	1.00	0.17
oP	LPG	4	3	Refinery energy	100	0	0	0	31.2				G	0.170	1.00	1.00	0.17
oR	RFG	1	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oR	RFG	2	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oR	RFG	3	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oR	RFG	4	3	Refinery energy	100	0	0	0	31.2				G	0.690	1.00	1.00	0.69
oD	Diese	1	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.100	0.10	1.00	1.00
oD	Diese	2	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.100	0.10	1.00	1.00
oD	Diese	3	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.100	0.10	1.00	1.00
oD	Diese	4	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.100	0.10	1.00	1.00
oG	Gasol	1	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.950	0.95	1.00	1.00
oG	Gasol	2	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.950	0.95	1.00	1.00
oG	Gasol	3	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.950	0.95	1.00	1.00
oG	Gasol	4	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.950	0.95	1.00	1.00
oP	LPG	1	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.000	0.00	1.00	0.00
oP	LPG	2	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.000	0.00	1.00	0.00
oP	LPG	3	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.000	0.00	1.00	0.00
oP	LPG	4	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.000	0.00	1.00	0.00
oR	RFG	1	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.600	0.60	1.00	1.00
oR	RFG	2	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.600	0.60	1.00	1.00
oR	RFG	3	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.600	0.60	1.00	1.00
oR	RFG	4	3	Refinery FCC & boil	100	0	0	0	32.2				G	0.600	0.60	1.00	1.00
oD	Diese	1	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.250	1.00	1.00	0.25
oG	Gasol	1	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.690	1.00	1.00	0.69
oP	LPG	1	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.020	1.00	1.00	0.02
oR	RFG	1	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.690	1.00	1.00	0.69
oD	Diese	2	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.133	1.00	0.53	0.25
oG	Gasol	2	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oP	LPG	2	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.011	1.00	0.53	0.02
oR	RFG	2	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oD	Diese	3	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.133	1.00	0.53	0.25
oG	Gasol	3	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oP	LPG	3	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.011	1.00	0.53	0.02
oR	RFG	3	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oD	Diese	4	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.133	1.00	0.53	0.25
oG	Gasol	4	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oP	LPG	4	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.011	1.00	0.53	0.02
oR	RFG	4	3	Refinery valvs	100	0	0	0	33.1	33.2	33.3	33.4	G	0.366	1.00	0.53	0.69
oD	Diese	1	3	Crude storage ROW	0	0	45	5	35.1	34.2			G	0.250	1.00	1.00	0.25

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oD	Diese	2	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.250	1.00	1.00	0.25
oD	Diese	3	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.250	1.00	1.00	0.25
oD	Diese	4	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.250	1.00	1.00	0.25
oG	Gasol	1	3	Crude storage ROW	0	0	45	5	35.1	34.2			G	0.560	1.00	1.00	0.56
oG	Gasol	2	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.560	1.00	1.00	0.56
oG	Gasol	3	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.560	1.00	1.00	0.56
oG	Gasol	4	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.560	1.00	1.00	0.56
oP	LPG	1	3	Crude storage ROW	0	0	45	5	35.1	34.2			G	0.020	1.00	1.00	0.02
oP	LPG	2	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.020	1.00	1.00	0.02
oP	LPG	3	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.020	1.00	1.00	0.02
oP	LPG	4	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.020	1.00	1.00	0.02
oR	RFG	1	3	Crude storage ROW	0	0	45	5	35.1	34.2			G	0.557	0.96	1.00	0.58
oR	RFG	2	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.557	0.96	1.00	0.58
oR	RFG	3	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.557	0.96	1.00	0.58
oR	RFG	4	3	Crude storage ROW	0	0	34	24	35.1	34.2			G	0.557	0.96	1.00	0.58
oD	Diese	1	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.250	1.00	1.00	0.25
oD	Diese	2	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.133	1.00	0.53	0.25
oD	Diese	3	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.133	1.00	0.53	0.25
oD	Diese	4	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.133	1.00	0.53	0.25
oG	Gasol	1	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.560	1.00	1.00	0.56
oG	Gasol	2	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.297	1.00	0.53	0.56
oG	Gasol	3	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.297	1.00	0.53	0.56
oG	Gasol	4	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.297	1.00	0.53	0.56
oP	LPG	1	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.020	1.00	1.00	0.02
oP	LPG	2	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.011	1.00	0.53	0.02
oP	LPG	3	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.011	1.00	0.53	0.02
oP	LPG	4	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.011	1.00	0.53	0.02
oR	RFG	1	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.557	0.96	1.00	0.58
oR	RFG	2	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.295	0.96	0.53	0.58
oR	RFG	3	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.295	0.96	0.53	0.58
oR	RFG	4	3	Crude storage SC	100	0	0	0	35.1	34.2			G	0.111	0.96	0.20	0.58
nH	H2	3	3	Gasifier	0	100	0	0	32.3				H	1.010	1.01	1.00	1.00
nH	H2	4	3	Gasifier	0	100	0	0	32.3				H	1.010	1.01	1.00	1.00
nH	H2	2	3	Vents fugitives	0	100	0	0	33.1				H	1.010	1.01	1.00	1.00
nH	H2	3	3	Vents fugitives	0	100	0	0	33.1				H	1.010	1.01	1.00	1.00
nH	H2	4	3	Vents fugitives	0	100	0	0	33.1				H	1.010	1.01	1.00	1.00
nC	CNG	1	3	Sweetner plant	5	25	64	6	31.1				n	1.000	1.00	1.00	1.00
nC	CNG	2	3	Sweetner plant	0	0	50	50	31.1				n	1.000	1.00	1.00	1.00
nC	CNG	3	3	Sweetner plant	0	0	50	50	31.1				n	1.000	1.00	1.00	1.00
nC	CNG	4	3	Sweetner plant	0	0	50	50	31.1				n	1.000	1.00	1.00	1.00
oD	Diese	1	3	Natural Gas	100	0	0	0	39.1				n	0.050	1.00	1.00	0.05
oG	Gasol	1	3	Natural Gas	100	0	0	0	39.1				n	0.050	1.00	1.00	0.05
oP	LPG	1	3	Natural Gas	100	0	0	0	39.1				n	0.020	1.00	1.00	0.02
oR	RFG	1	3	Natural Gas	100	0	0	0	39.1				n	0.060	1.00	1.00	0.06
oD	Diese	2	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oG	Gasol	2	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oP	LPG	2	3	Natural Gas	100	0	0	0	39.2				n	0.020	1.00	1.00	0.02
oR	RFG	2	3	Natural Gas	100	0	0	0	39.2				n	0.060	1.00	1.00	0.06
oD	Diese	3	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oG	Gasol	3	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oP	LPG	3	3	Natural Gas	100	0	0	0	39.2				n	0.020	1.00	1.00	0.02
oR	RFG	3	3	Natural Gas, SC	100	0	0	0	39.2				n	0.060	1.00	1.00	0.06
oD	Diese	4	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oG	Gasol	4	3	Natural Gas	100	0	0	0	39.2				n	0.050	1.00	1.00	0.05
oP	LPG	4	3	Natural Gas	100	0	0	0	39.2				n	0.020	1.00	1.00	0.02
oR	RFG	4	3	Natural Gas	100	0	0	0	39.2				n	0.060	1.00	1.00	0.06
oD	Diese	1	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oG	Gasol	1	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oP	LPG	1	3	Natural Gas	0	15	67	18	39.4				n	0.020	1.00	1.00	0.02
oR	RFG	1	3	Natural Gas	0	15	67	18	39.4				n	0.060	1.00	1.00	0.06
oD	Diese	2	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oG	Gasol	2	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oP	LPG	2	3	Natural Gas	0	15	67	18	39.4				n	0.020	1.00	1.00	0.02
oR	RFG	2	3	Natural Gas	0	15	67	18	39.4				n	0.060	1.00	1.00	0.06
oD	Diese	3	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oG	Gasol	3	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oP	LPG	3	3	Natural Gas	0	15	67	18	39.4				n	0.020	1.00	1.00	0.02
oR	RFG	3	3	Natural Gas, non SC	0	15	67	18	39.4				n	0.060	1.00	1.00	0.06
oD	Diese	4	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oG	Gasol	4	3	Natural Gas	0	15	67	18	39.4				n	0.050	1.00	1.00	0.05
oP	LPG	4	3	Natural Gas	0	15	67	18	39.4				n	0.020	1.00	1.00	0.02
oR	RFG	4	3	Natural Gas	0	15	67	18	39.4				n	0.060	1.00	1.00	0.06
nL	LNG	2	3	Liquefaction	0	100	0	0	51.4				n	2.060	1.00	1.00	2.06
nL	LNG	3	3	Liquefaction	0	100	0	0	51.4				n	1.830	1.00	1.00	1.83
nL	LNG	4	3	Liquefaction	0	100	0	0	51.4				n	1.830	1.00	1.00	1.83
nM	M100	1	3	Part-ox.	0	0	0	100	32.3				nM	0.000	0.00	0.00	0.00
nN	M85	1	3	Part-ox.	0	0	0	100	32.3				nM	0.000	0.00	0.00	0.00
nM	M100	2	3	Part-ox.	0	0	0	100	32.3				nM	0.500	0.50	1.00	1.00
nN	M85	2	3	Part-ox.	0	0	0	100	32.3				nM	0.434	0.43	1.00	1.00
nM	M100	3	3	Part-ox.	0	0	0	100	32.3				nM	0.500	0.50	1.00	1.00
nN	M85	3	3	Part-ox.	0	0	0	100	32.3				nM	0.434	0.43	1.00	1.00
nM	M100	4	3	Part-ox.	0	0	0	100	32.3				nM	0.500	0.50	1.00	1.00
nN	M85	4	3	Part-ox.	0	0	0	100	32.3				nM	0.434	0.43	1.00	1.00
bN	M85	1	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		nM	0.868	0.87	1.00	1.00
nM	M100	1	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	1.000	1.00	1.00	1.00
nN	M85	1	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	0.868	0.87	1.00	1.00
bN	M85	2	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		nM	0.460	0.87	0.53	1.00
nM	M100	2	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	1.000	1.00	1.00	1.00
nN	M85	2	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	0.868	0.87	1.00	1.00
bN	M85	3	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		nM	0.461	0.87	0.53	1.00
nM	M100	3	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	0.500	0.50	1.00	1.00
nN	M85	3	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	0.434	0.43	1.00	1.00
bN	M85	4	3	Vents fugitives	0	100	0	0	33.1	34.1	35.1		nM	0.460	0.87	0.53	1.00
nM	M100	4	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	1.000	1.00	1.00	1.00
nN	M85	4	3	Vents fugitives	0	0	0	100	33.1	34.1	35.1		nM	0.460	0.87	0.53	1.00
oR	RFG	1	3	Methanol, SC	100	0	0	0	39.1				nM	0.040	1.00	1.00	0.04
oR	RFG	2	3	Methanol, SC	100	0	0	0	39.2				nM	0.040	1.00	1.00	0.04
oR	RFG	3	3	Methanol, SC	100	0	0	0	39.2				nM	0.040	1.00	1.00	0.04
oR	RFG	4	3	Methanol, SC	100	0	0	0	39.2				nM	0.040	1.00	1.00	0.04
oR	RFG	1	3	Methanol, non SC	0	3	2	95	39.4				nM	0.040	1.00	1.00	0.04
oR	RFG	2	3	Methanol, non SC	0	3	2	95	39.4				nM	0.040	1.00	1.00	0.04
oR	RFG	3	3	Methanol, non SC	0	3	2	95	39.4				nM	0.040	1.00	1.00	0.04
oR	RFG	4	3	Methanol, non SC	0	3	2	95	39.4				nM	0.040	1.00	1.00	0.04
bE	E85	1	3	RFG prod. SC	100	0	0	0	39.1				R	0.170	0.17	1.00	1.00
bN	M85	1	3	RFG prod. SC	100	0	0	0	39.1				R	0.132	0.13	1.00	1.00
nN	M85	1	3	RFG prod. SC	100	0	0	0	39.1				R	0.132	0.13	1.00	1.00
bE	E85	2	3	RFG prod. SC	100	0	0	0	39.2				R	0.170	0.17	1.00	1.00
bN	M85	2	3	RFG prod. SC	100	0	0	0	39.2				R	0.132	0.13	1.00	1.00
nN	M85	2	3	RFG prod. SC	100	0	0	0	39.2				R	0.132	0.13	1.00	1.00
bE	E85	3	3	RFG prod. SC	100	0	0	0	39.2				R	0.170	0.17	1.00	1.00
bN	M85	3	3	RFG prod. SC	100	0	0	0	39.2				R	0.132	0.13	1.00	1.00
nN	M85	3	3	RFG prod. SC	100	0	0	0	39.2				R	0.130	0.13	1.00	1.00
bE	E85	4	3	RFG prod. SC	100	0	0	0	39.2				R	0.170	0.17	1.00	1.00
bN	M85	4	3	RFG prod. SC	100	0	0	0	39.2				R	0.132	0.13	1.00	1.00
nN	M85	4	3	RFG prod. SC	100	0	0	0	39.2				R	0.132	0.13	1.00	1.00
bE	E85	1	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.170	0.17	1.00	1.00
bN	M85	1	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
nN	M85	1	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
bE	E85	2	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.170	0.17	1.00	1.00
bN	M85	2	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
nN	M85	2	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
bE	E85	3	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.170	0.17	1.00	1.00
bN	M85	3	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
nN	M85	3	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.130	0.13	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
bE	E85	4	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.170	0.17	1.00	1.00
bN	M85	4	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
nN	M85	4	3	RFG prod. CA/US/ROW	0	20	20	60	39.4				R	0.132	0.13	1.00	1.00
bN	M85	1	3	Reforming	0	100	0	0	32.2				xB	0.000	0.00	0.00	0.00
nM	M100	1	3	Reforming	0	0	0	100	32.2				xB	3.220	1.00	1.00	3.22
nN	M85	1	3	Reforming	0	0	0	100	32.2				xB	2.795	0.87	1.00	3.22
bN	M85	2	3	Reforming	0	100	0	0	32.2				xB	0.000	0.00	0.00	0.00
nM	M100	2	3	Reforming	0	0	0	100	32.2				xB	1.500	0.50	1.00	3.00
nN	M85	2	3	Reforming	0	0	0	100	32.2				xB	1.302	0.43	1.00	3.00
bN	M85	3	3	Reforming	0	100	0	0	32.2				xB	0.000	0.00	0.00	0.00
nM	M100	3	3	Reforming	0	0	0	100	32.2				xB	0.600	1.00	0.20	3.00
nN	M85	3	3	Reforming	0	0	0	100	32.2				xB	0.521	0.87	0.20	3.00
bN	M85	4	3	Reforming	0	100	0	0	32.2				xB	0.000	0.00	0.00	0.00
nM	M100	4	3	Reforming	0	0	0	100	32.2				xB	1.500	0.50	1.00	3.00
nN	M85	4	3	Reforming	0	0	0	100	32.2				xB	1.302	0.43	1.00	3.00
nH	H2	2	3	Reforming	0	100	0	0	32.3				xB	5.818	1.01	1.00	5.76
bE	E85	1	3	NG boiler	100	0	0	0	35.1				xB	3.403	0.83	1.00	4.10
bE	E85	2	3	Coal Boiler	0	0	100	0	36.1				xB	2.905	0.83	1.00	3.50
bE	E85	3	3	Biomass boiler, CA	0	100	0	0	37.1				xB	3.021	0.83	1.00	3.64
bE	E85	4	3	Biomass boiler	0	100	0	0	37.1				xB	3.021	0.83	1.00	3.64
nH	H2	1	3	Solar	0	0	0	100	19.9				xJ	0.000	1.00	0.00	0.00
bE	E85	3	3		0	100	0	0	19.9				xJ	0.000	0.00	0.00	0.00
bE	E85	4	3		0	100	0	0	19.9				xJ	0.000	0.00	0.00	0.00
nL	LNG	1	3	Liquefaction	0	0	100	0	32.3				xJ	0.040	1.00	1.00	0.04
bE	E85	1	3	Electricity	18	25	57	0	32.4				xJ	0.000	1.00	1.00	0.00
bN	M85	1	3	Electricity	0	45	55	0	32.4				xJ	0.668	0.87	1.00	0.77
oD	Diese	1	3	Electricity	18	25	57	0	32.4				xJ	0.450	1.00	1.00	0.45
oG	Gasol	1	3	Electricity	18	25	57	0	32.4				xJ	0.750	1.00	1.00	0.75
oP	LPG	1	3	Electricity	18	25	57	0	32.4				xJ	0.019	1.00	1.00	0.02
oR	RFG	1	3	Electricity	18	25	57	0	32.4				xJ	0.750	1.00	1.00	0.75
bE	E85	2	3	Electricity	0	0	100	0	35.3				xJ	-1.500	1.00	1.00	-1.50
bN	M85	2	3	Electricity	0	45	55	0	39.4				xJ	0.929	0.87	1.00	1.07
nH	H2	2	3	Electricity	0	45	55	0	39.4				xJ	4.545	1.01	1.00	4.50
nL	LNG	2	3	Liquefaction	0	45	55	0	39.4				xJ	0.040	1.00	1.00	0.04
oD	Diese	2	3	Electricity	22	23	55	0	39.4				xJ	0.450	1.00	1.00	0.45
oG	Gasol	2	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
oP	LPG	2	3	Electricity	22	23	55	0	39.4				xJ	0.020	1.00	1.00	0.02
oR	RFG	2	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
bE	E85	3	3	Electricity	0	45	55	0	39.4				xJ	-1.780	1.00	1.00	-1.78
bN	M85	3	3	Electricity	0	45	55	0	39.4				xJ	0.929	0.87	1.00	1.07
nH	H2	3	3	Electricity	0	45	55	0	39.4				xJ	6.242	1.01	1.00	6.18
nL	LNG	3	3	Liquefaction	0	45	55	0	39.4				xJ	0.040	1.00	1.00	0.04
oD	Diese	3	3	Electricity	22	23	55	0	39.4				xJ	0.450	1.00	1.00	0.45
oG	Gasol	3	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
oP	LPG	3	3	Electricity	22	23	55	0	39.4				xJ	0.020	1.00	1.00	0.02
oR	RFG	3	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
bE	E85	4	3	Electricity	0	45	55	0	39.4				xJ	-1.780	1.00	1.00	-1.78
bN	M85	4	3	Electricity	0	45	55	0	39.4				xJ	0.929	0.87	1.00	1.07
nH	H2	4	3	Electricity	0	45	55	0	39.4				xJ	6.242	1.01	1.00	6.18
nL	LNG	4	3	Liquefaction	0	45	55	0	39.4				xJ	0.040	1.00	1.00	0.04
oD	Diese	4	3	Electricity	22	23	55	0	39.4				xJ	0.450	1.00	1.00	0.45
oG	Gasol	4	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
oP	LPG	4	3	Electricity	22	23	55	0	39.4				xJ	0.020	1.00	1.00	0.02
oR	RFG	4	3	Electricity	22	23	55	0	39.4				xJ	0.750	1.00	1.00	0.75
nM	M100	1	3	Electricity	0	0	0	100	39.5				xJ	-0.040	1.00	1.00	-0.04
nN	M85	1	3	Electricity	0	0	0	100	39.5				xJ	-0.035	0.87	1.00	-0.04
nM	M100	2	3	Electricity	0	0	0	100	39.5				xJ	0.080	1.00	1.00	0.08
nN	M85	2	3	Electricity	0	0	0	100	39.5				xJ	0.069	0.87	1.00	0.08
nM	M100	3	3	Electricity	0	0	0	100	39.5				xJ	0.080	1.00	1.00	0.08
nN	M85	3	3	Electricity	0	0	0	100	39.5				xJ	0.069	0.87	1.00	0.08
nM	M100	4	3	Electricity	0	0	0	100	39.5				xJ	0.080	1.00	1.00	0.08
nN	M85	4	3	Electricity	0	0	0	100	39.5				xJ	0.069	0.87	1.00	0.08

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
nH	H2	1	4	Solar	100	0	0	0	19.9				xJ	0.000	1.00	0.00	0.00
oP	LPG	1	4	Pipeline	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oP	LPG	2	4	Pipeline	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oP	LPG	3	4	Pipeline	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oP	LPG	4	4	Pipeline	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
nC	CNG	1	4	Pipeline	20	0	60	20	41.1				n	1.000	1.00	1.00	1.00
nC	CNG	2	4	Pipeline	0	0	50	50	41.1				n	1.000	1.00	1.00	1.00
nC	CNG	3	4	Pipeline	0	0	50	50	41.1				n	1.000	1.00	1.00	1.00
nC	CNG	4	4	Pipeline	0	0	50	50	41.1				n	1.000	1.00	1.00	1.00
nH	H2	2	4	storage	0	100	0	0	41.1				H	1.010	1.01	1.00	1.00
nH	H2	3	4	Storage	0	100	0	0	41.1				H	0.000	1.01	0.00	0.00
nH	H2	4	4	Storage	0	100	0	0	41.1				H	0.000	1.01	0.00	0.00
nL	LNG	1	4	Storage	0	0	100	0	41.1				L	1.000	1.00	1.00	1.00
nL	LNG	2	4	Storage	0	100	0	0	41.1				L	1.000	1.00	1.00	1.00
nL	LNG	3	4	Storage	0	100	0	0	41.1				L	1.000	1.00	1.00	1.00
nL	LNG	4	4	Storage	0	100	0	0	41.1				L	1.000	1.00	1.00	1.00
bE	E85	1	4	Fixed roof tank	100	0	0	0	41.3				E	5.061	0.83	6.10	1.00
bE	E85	2	4	Float roof	100	0	100	0	41.3				E	0.830	0.83	1.00	1.00
bE	E85	3	4	Float roof	100	100	0	0	41.3				E	0.440	0.83	0.53	1.00
bE	E85	4	4	Float roof	100	100	0	0	41.3				E	0.083	0.83	0.10	1.00
bN	M85	1	4	Float roof	0	100	0	0	41.3				M	2.344	0.87	2.70	1.00
bN	M85	2	4	Float roof	100	100	0	0	41.3				M	0.868	0.87	1.00	1.00
bN	M85	3	4	Float roof	100	100	0	0	41.3				M	0.460	0.87	0.53	1.00
bN	M85	4	4	Float roof	100	100	0	0	41.3				M	0.087	0.87	0.10	1.00
nM	M100	1	4	Float roof	0	0	0	100	41.3				M	1.000	1.00	1.00	1.00
nM	M100	2	4	Float roof	0	0	0	100	41.3				M	1.000	1.00	1.00	1.00
nM	M100	3	4	Float roof	0	0	0	100	41.3				M	1.000	1.00	1.00	1.00
nM	M100	4	4	Float roof	0	0	0	100	41.3				M	1.000	1.00	1.00	1.00
nN	M85	1	4	Float roof	0	0	0	100	41.3				M	0.868	0.87	1.00	1.00
nN	M85	2	4	Float roof	0	0	0	100	41.3				M	0.868	0.87	1.00	1.00
nN	M85	3	4	Float roof	0	0	0	100	41.3				M	0.868	0.87	1.00	1.00
nN	M85	4	4	Float roof	0	0	0	100	41.3				M	0.868	0.87	1.00	1.00
oD	Diese	1	4	Float roof	100	0	0	0	41.3				D	1.000	1.00	1.00	1.00
oD	Diese	2	4	Float roof	100	0	0	0	41.3				D	1.000	1.00	1.00	1.00
oD	Diese	3	4	Float roof	100	0	0	0	41.3				D	1.000	1.00	1.00	1.00
oD	Diese	4	4	Float roof	100	0	0	0	41.3				D	1.000	1.00	1.00	1.00
oG	Gasol	1	4	Float roof	100	0	0	0	41.3				G	1.000	1.00	1.00	1.00
oG	Gasol	2	4	Float roof	100	0	0	0	41.3				G	0.530	1.00	0.53	1.00
oG	Gasol	3	4	Float roof	100	0	0	0	41.3				G	0.530	1.00	0.53	1.00
oG	Gasol	4	4	Float roof	100	0	0	0	41.3				G	0.100	1.00	0.10	1.00
oR	RFG	1	4	Float roof	100	0	0	0	41.3				R	1.000	1.00	1.00	1.00
oR	RFG	2	4	Float roof	100	0	0	0	41.3				R	0.530	1.00	0.53	1.00
oR	RFG	3	4	Float roof	100	0	0	0	41.3				R	0.530	1.00	0.53	1.00
oR	RFG	4	4	Float roof	100	0	0	0	41.3				R	0.100	1.00	0.10	1.00
oD	Diese	1	5	Pipeline	100	0	0	0	51.2				D	1.000	1.00	1.00	1.00
oD	Diese	2	5	Pipeline	100	0	0	0	51.2				D	1.000	1.00	1.00	1.00
oD	Diese	3	5	Pipeline	100	0	0	0	51.2				D	1.000	1.00	1.00	1.00
oD	Diese	4	5	Pipeline	100	0	0	0	51.2				D	1.000	1.00	1.00	1.00
bE	E85	1	5	Ship transport	2.6	54.4	43	0	51.1				E	0.000	0.00	0.00	0.00
bE	E85	2	5	Ship transport	2.6	27.2	21.5	771	51.1				E	0.000	1.00	0.00	1.00
bE	E85	3	5	Ship transport	2.6	27.2	21.5	771	51.1				E	0.000	0.00	0.00	0.00
bE	E85	4	5	Ship transport	2.6	27.2	21.5	771	51.1				E	0.000	0.00	0.00	0.00
bE	E85	1	5	Port emissions	0	0	0	0	51.3				E	0.000	0.00	0.00	0.00
bE	E85	2	5	Port emissions	0	0	0	0	51.3				E	0.000	0.00	0.00	0.00
bE	E85	3	5	Port emissions	0	0	0	0	51.3				E	0.830	0.83	1.00	1.00
bE	E85	4	5	Port emissions	0	0	0	0	51.3				E	0.000	0.00	0.00	0.00
bE	E85	1	5	Rail transport	3	12	85	0	53.1				E	0.000	0.00	0.00	0.00
bE	E85	2	5	Rail transport	5	5	370	0	53.1				E	1.000	1.00	1.00	1.00
bE	E85	3	5	Rail transport	3	12	85	0	53.1				E	0.000	0.00	0.00	0.00
bE	E85	4	5	Rail transport	3	12	85	0	53.1				E	0.000	0.00	0.00	0.00
oG	Gasol	1	5	Pipeline	100	0	0	0	51.2				G	1.000	1.00	1.00	1.00
oG	Gasol	2	5	Pipeline	100	0	0	0	51.2				G	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oG	Gasol	3	5	Pipeline	100	0	0	0	51.2				G	1.000	1.00	1.00	1.00
oG	Gasol	4	5	Pipeline	100	0	0	0	51.2				G	1.000	1.00	1.00	1.00
nH	H2	2	5	Rail transport	3	12	85	0	51.1				H	0.000	1.01	0.00	0.00
nH	H2	3	5	Rail transport	3	12	85	0	51.1				H	0.000	1.01	0.00	0.00
nH	H2	4	5	Rail transport	3	12	85	0	51.1				H	0.000	1.01	0.00	0.00
nL	LNG	1	5	Transport	0	0	0	0	51.1	51.3	53.1		L	0.000	0.00	1.00	1.00
nL	LNG	2	5	Transport	0	0	0	0	51.1	51.3	53.1		L	0.000	0.00	1.00	1.00
nL	LNG	3	5	Transport	0	0	0	0	53.1				L	0.000	0.00	1.00	1.00
nL	LNG	4	5	Transport	0	0	0	0	53.1				L	0.000	0.00	1.00	1.00
bN	M85	1	5	Ship transport	2.6	54.4	43	0	51.1				M	0.000	0.00	0.00	0.00
nM	M100	1	5	Ship transport	2.6	54.4	43	0	51.1				M	1.000	1.00	1.00	1.00
nN	M85	1	5	Ship transport	2.6	54.4	43	0	51.1				M	0.868	0.87	1.00	1.00
bN	M85	2	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.000	0.00	0.00	0.00
nM	M100	2	5	Ship transport	2.6	27.2	21.5	771	51.1				M	1.000	1.00	1.00	1.00
nN	M85	2	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.868	0.87	1.00	1.00
bN	M85	3	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.000	0.00	0.00	0.00
nM	M100	3	5	Ship transport	2.6	27.2	21.5	771	51.1				M	1.000	1.00	1.00	1.00
nN	M85	3	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.868	0.87	1.00	1.00
bN	M85	4	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.000	0.00	0.00	0.00
nM	M100	4	5	Ship transport	2.6	27.2	21.5	771	51.1				M	1.000	1.00	1.00	1.00
nN	M85	4	5	Ship transport	2.6	27.2	21.5	771	51.1				M	0.868	0.87	1.00	1.00
bN	M85	1	5	Port emissions	100	0	0	100	51.3				M	0.000	0.00	0.00	0.00
nM	M100	1	5	Port emissions	100	0	0	100	51.3				M	1.000	1.00	1.00	1.00
nN	M85	1	5	Port emissions	100	0	0	100	51.3				M	0.868	0.87	1.00	1.00
bN	M85	2	5	Port emissions	100	0	0	100	51.3				M	0.000	0.00	0.00	0.00
nM	M100	2	5	Port emissions	100	0	0	100	51.3				M	1.000	1.00	1.00	1.00
nN	M85	2	5	Port emissions	100	0	0	100	51.3				M	0.868	0.87	1.00	1.00
bN	M85	3	5	Port emissions	100	0	0	100	51.3				M	0.000	0.00	0.00	0.00
nM	M100	3	5	Port emissions	100	0	0	100	51.3				M	1.000	1.00	1.00	1.00
nN	M85	3	5	Port emissions	100	0	0	100	51.3				M	0.868	0.87	1.00	1.00
bN	M85	4	5	Port emissions	100	0	0	100	51.3				M	0.000	0.00	0.00	0.00
nM	M100	4	5	Port emissions	100	0	0	100	51.3				M	1.000	1.00	1.00	1.00
nN	M85	4	5	Port emissions	100	0	0	100	51.3				M	0.868	0.87	1.00	1.00
bN	M85	1	5	Rail transport	3	97	0	0	53.1				M	0.000	0.87	1.00	0.00
bN	M85	1	5	Truck fugitives	0	100	0	0	71.2	72.1	74.1		M	0.868	0.87	1.00	1.00
bN	M85	2	5	Truck fugitives	0	100	0	0	71.2	72.1	74.1		M	0.000	0.87	1.00	0.00
bN	M85	3	5	Truck fugitives	0	100	0	0	71.2	72.1	74.1		M	0.000	0.87	1.00	0.00
bN	M85	4	5	Truck fugitives	0	100	0	0	71.2	72.1	74.1		M	0.000	0.87	1.00	0.00
bN	M85	1	5	Truck emissions	100	1600	0	0	73.1				M	1.000	1.00	1.00	1.00
bN	M85	2	5	Truck emissions	0	0	0	0	73.2				M	0.000	1.00	1.00	0.00
bN	M85	3	5	Truck emissions	0	0	0	0	73.2				M	0.000	0.87	1.00	0.00
bN	M85	4	5	Truck emissions	0	0	0	0	73.2				M	0.000	1.00	1.00	0.00
nC	CNG	1	5	G.T.s CA/ROW 1990	0	25	66	6	52.3				n	0.450	0.45	1.00	1.00
nC	CNG	2	5	G.T.s CA/ROW 2010	0	23	97	10	52.4				n	0.500	0.50	1.00	1.00
nC	CNG	3	5	G.T.s CA/ROW 2010	0	23	97	10	52.4				n	0.500	0.50	1.00	1.00
nC	CNG	4	5	G.T.s CA/ROW 2010	0	23	97	10	52.4				n	0.500	0.50	1.00	1.00
nC	CNG	1	5	G.T.s SC 1990	5	0	0	0	52.1				n	0.450	0.45	1.00	1.00
nC	CNG	2	5	G.T.s SC 2010	5	0	0	0	52.2				n	0.500	0.50	1.00	1.00
nC	CNG	3	5	G.T.s SC 2010	5	0	0	0	52.2				n	0.500	0.50	1.00	1.00
nC	CNG	4	5	G.T.s SC 2010	5	0	0	0	52.2				n	0.500	0.50	1.00	1.00
nC	CNG	2	5	Recips CA/ROW 2010	0	23	97	10	51.4				n	0.500	0.50	1.00	1.00
nC	CNG	3	5	Recips CA/ROW 2010	0	23	97	10	51.4				n	0.500	0.50	1.00	1.00
nC	CNG	4	5	Recips CA/ROW 2010	0	23	97	10	51.4				n	0.500	0.50	1.00	1.00
nC	CNG	1	5	Recips CA/ROW1990	0	25	66	6	51.3				n	0.550	0.55	1.00	1.00
nC	CNG	1	5	Recips SC 1990	5	0	0	0	51.1				n	0.550	0.55	1.00	1.00
nC	CNG	2	5	Recips SC 2010	5	0	0	0	51.2				n	0.500	0.50	1.00	1.00
nC	CNG	3	5	Recips SC 2010	5	0	0	0	51.2				n	0.500	0.50	1.00	1.00
nC	CNG	4	5	Recips SC 2010	5	0	0	0	51.2				n	0.500	0.50	1.00	1.00
nC	CNG	1	5	Transmission	5	25	64	6	53.1				n	1.000	1.00	1.00	1.00
nC	CNG	2	5	Transmission	4	17	72	7	53.1				n	1.000	1.00	1.00	1.00
nC	CNG	3	5	Transmission	4	17	72	7	53.1				n	1.000	1.00	1.00	1.00
nC	CNG	4	5	Transmission	4	17	72	7	53.1				n	0.600	0.60	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oR	RFG	1	5	Pipeline	100	0	0	0	51.2				R	1.000	1.00	1.00	1.00
oR	RFG	2	5	Pipeline	100	0	0	0	51.2				R	1.000	1.00	1.00	1.00
oR	RFG	3	5	Pipeline	100	0	0	0	51.2				R	1.000	1.00	1.00	1.00
oR	RFG	4	5	Pipeline	100	0	0	0	51.2				R	1.000	1.00	1.00	1.00
bE	E85	1	5	none	100	0	0	0	19.9				xJ	0.830	0.83	1.00	1.00
nH	H2	1	5	Solar	100	0	0	0	19.9				xJ	0.000	1.00	0.00	0.00
oP	LPG	1	5	Transport	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
bE	E85	2	5	Pipeline	0	0	0	0	19.9				xJ	0.830	0.83	1.00	1.00
oP	LPG	2	5	Transport	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
bE	E85	3	5	Pipeline	0	100	0	0	19.9				xJ	0.830	0.83	1.00	1.00
oP	LPG	3	5	Transport	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
bE	E85	4	5	Pipeline	0	100	0	0	19.9				xJ	0.830	0.83	1.00	1.00
oP	LPG	4	5	Transport	100	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
oD	Diese	1	6	Float roof	100	0	0	0	61.3	61.4			D	1.000	1.00	1.00	1.00
oD	Diese	2	6	Float roof	100	0	0	0	61.3	61.4			D	1.000	1.00	1.00	1.00
oD	Diese	3	6	Float roof	100	0	0	0	61.3	61.4			D	1.000	1.00	1.00	1.00
oD	Diese	4	6	Float roof	100	0	0	0	61.3	61.4			D	1.000	1.00	1.00	1.00
bE	E85	1	6	Float roof, E85	100	0	0	0	61.3				E	0.000	0.00	0.00	0.00
bE	E85	2	6	Float roof, E85	100	0	0	0	61.3				E	0.530	1.00	0.53	1.00
bE	E85	3	6	Float roof, E85	100	0	0	0	61.3				E	0.530	1.00	0.53	1.00
bE	E85	4	6	Float roof, E85	100	0	0	0	61.3				E	0.000	0.00	0.10	0.00
oG	Gasol	1	6	Float roof	100	0	0	0	61.3	61.4			G	1.000	1.00	1.00	1.00
oG	Gasol	2	6	Float roof	100	0	0	0	61.3	61.4			G	0.530	1.00	0.53	1.00
oG	Gasol	3	6	Float roof	100	0	0	0	61.3	61.4			G	0.530	1.00	0.53	1.00
oG	Gasol	4	6	Float roof	100	0	0	0	61.3	61.4			G	0.100	1.00	0.10	1.00
nH	H2	2	6	storage	0	100	0	0	61.1				H	1.010	1.01	1.00	1.00
nH	H2	3	6	Storage	0	100	0	0	61.1				H	1.010	1.01	1.00	1.00
nH	H2	4	6	Storage	0	100	0	0	61.1				H	1.010	1.01	1.00	1.00
nL	LNG	1	6	Storage	0	0	100	0	61.1				L	1.000	1.00	1.00	1.00
nL	LNG	2	6	Storage	0	100	0	0	61.1				L	1.000	1.00	1.00	1.00
nL	LNG	3	6	Storage	0	100	0	0	61.1				L	1.000	1.00	1.00	1.00
nL	LNG	4	6	Storage	0	100	0	0	61.1				L	1.000	1.00	1.00	1.00
nN	M100	1	6	Float roof	100	0	0	0	61.3				M	2.700	1.00	2.70	1.00
nN	M85	1	6	Float roof	100	0	0	0	61.3				M	2.344	0.87	2.70	1.00
nM	M100	2	6	Float roof	100	0	0	0	61.3				M	0.530	1.00	0.53	1.00
nN	M85	2	6	Float roof	100	0	0	0	61.3				M	0.460	0.87	0.53	1.00
nM	M100	3	6	Float roof	100	0	0	0	61.3				M	0.530	1.00	0.53	1.00
nN	M85	3	6	Float roof	100	0	0	0	61.3				M	0.460	0.87	0.53	1.00
nM	M100	4	6	Float roof	100	0	0	0	61.3				M	0.100	1.00	0.10	1.00
nN	M85	4	6	Float roof	100	0	0	0	61.3				M	0.087	0.87	0.10	1.00
nC	CNG	1	6	Storage	100	0	0	0	61.1				n	1.000	1.00	1.00	1.00
nC	CNG	2	6	Storage	100	0	0	0	61.1				n	1.000	1.00	1.00	1.00
nC	CNG	3	6	Storage	100	0	0	0	61.1				n	1.000	1.00	1.00	1.00
nC	CNG	4	6	Storage	100	0	0	0	61.1				n	1.000	1.00	1.00	1.00
bN	M85	1	6	Float roof	100	0	0	0	61.3	61.4			N	2.700	1.00	2.70	1.00
bN	M85	2	6	Float roof	100	0	0	0	61.3	61.4			N	0.530	1.00	0.53	1.00
bN	M85	3	6	Float roof	100	0	0	0	61.3	61.4			N	0.530	1.00	0.53	1.00
bN	M85	4	6	Float roof	100	0	0	0	61.3	61.4			N	0.100	1.00	0.10	1.00
oP	LPG	1	6	Storage	100	0	0	0	61.1				P	1.000	1.00	1.00	1.00
oP	LPG	2	6	Storage	100	0	0	0	61.1				P	1.000	1.00	1.00	1.00
oP	LPG	3	6	Storage	100	0	0	0	61.1				P	1.000	1.00	1.00	1.00
oP	LPG	4	6	Storage	100	0	0	0	61.1				P	1.000	1.00	1.00	1.00
nN	M85	1	6	Float roof	100	0	0	0	61.3	61.4			R	0.132	0.13	1.00	1.00
oR	RFG	1	6	Float roof	100	0	0	0	61.3	61.4			R	1.000	1.00	1.00	1.00
nN	M85	2	6	Float roof	100	0	0	0	61.3	61.4			R	0.070	0.13	0.53	1.00
oR	RFG	2	6	Float roof	100	0	0	0	61.3	61.4			R	0.530	1.00	0.53	1.00
nN	M85	3	6	Float roof	100	0	0	0	61.3	61.4			R	0.070	0.13	0.53	1.00
oR	RFG	3	6	Float roof	100	0	0	0	61.3	61.4			R	0.530	1.00	0.53	1.00
nN	M85	4	6	Float roof	100	0	0	0	61.3	61.4			R	0.013	0.13	0.10	1.00
oR	RFG	4	6	Float roof	100	0	0	0	61.3	61.4			R	0.100	1.00	0.10	1.00
nH	H2	1	6	Solar	100	0	0	0	19.9				xJ	0.000	0.00	0.00	0.00
nC	CNG	1	7	Distrib. leaks	100	0	0	0	73.1				C	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
nC	CNG	2	7	Distrib. leaks	100	0	0	0	73.1				C	1.000	1.00	1.00	1.00
nC	CNG	3	7	Distrib. leaks	100	0	0	0	73.1				C	1.000	1.00	1.00	1.00
nC	CNG	4	7	Distrib. leaks	100	0	0	0	73.1				C	1.000	1.00	1.00	1.00
oD	Diese	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		D	1.000	1.00	1.00	1.00
oD	Diese	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		D	1.000	1.00	1.00	1.00
oD	Diese	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		D	1.000	1.00	1.00	1.00
oD	Diese	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		D	1.000	1.00	1.00	1.00
oD	Diese	1	7	Truck emissions	100	0	0	0	73.1				D	1.000	1.00	1.00	1.00
oD	Diese	2	7	Truck emissions	100	0	0	0	73.2				D	1.000	1.00	1.00	1.00
oD	Diese	3	7	Truck emissions	100	0	0	0	73.2				D	1.000	1.00	1.00	1.00
oD	Diese	4	7	Truck emissions	100	0	0	0	73.2				D	1.000	1.00	1.00	1.00
bE	E85	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		E	1.000	1.00	1.00	1.00
bE	E85	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		E	1.000	1.00	1.00	1.00
bE	E85	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		E	1.000	1.00	1.00	1.00
bE	E85	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		E	1.000	1.00	1.00	1.00
bE	E85	1	7	Truck emissions	100	0	0	0	73.1				E	1.000	1.00	1.00	1.00
bE	E85	2	7	Truck emissions	100	0	0	0	73.2				E	1.000	1.00	1.00	1.00
bE	E85	3	7	Truck emissions	100	0	0	0	73.2				E	1.000	1.00	1.00	1.00
bE	E85	4	7	Truck emissions	100	0	0	0	73.2				E	1.000	1.00	1.00	1.00
oG	Gasol	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		G	1.000	1.00	1.00	1.00
oG	Gasol	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		G	1.000	1.00	1.00	1.00
oG	Gasol	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		G	1.000	1.00	1.00	1.00
oG	Gasol	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		G	1.000	1.00	1.00	1.00
oG	Gasol	1	7	Truck emissions	100	0	0	0	73.1				G	1.000	1.00	1.00	1.00
oG	Gasol	2	7	Truck emissions	100	0	0	0	73.2				G	1.000	1.00	1.00	1.00
oG	Gasol	3	7	Truck emissions	100	0	0	0	73.2				G	1.000	1.00	1.00	1.00
oG	Gasol	4	7	Truck emissions	100	0	0	0	73.2				G	1.000	1.00	1.00	1.00
nH	H2	2	7	Truck emissions	100	100	0	0	73.2				H	1.010	1.01	1.00	1.00
nH	H2	3	7	Truck emissions	100	100	0	0	73.2				H	1.010	1.01	1.00	1.00
nH	H2	4	7	Truck emissions	100	100	0	0	73.2				H	1.010	1.01	1.00	1.00
nL	LNG	1	7	Truck fugitives	100	0	0	0	72.1	72.7	74.1		L	1.000	1.00	1.00	1.00
nL	LNG	2	7	Truck fugitives	100	0	0	0	72.1	74.1			L	1.000	1.00	1.00	1.00
nL	LNG	3	7	Truck fugitives	100	0	0	0	72.1	74.1			L	1.000	1.00	1.00	1.00
nL	LNG	4	7	Truck fugitives	100	0	0	0	72.1	74.1			L	1.000	1.00	1.00	1.00
nL	LNG	1	7	Truck emissions	100	100	4000	0	73.1				L	1.000	1.00	1.00	1.00
nL	LNG	2	7	Truck emissions	100	100	0	0	73.2				L	1.000	1.00	1.00	1.00
nL	LNG	3	7	Truck emissions	100	100	0	0	73.2				L	1.000	1.00	1.00	1.00
nL	LNG	4	7	Truck emissions	100	100	0	0	73.2				L	1.000	1.00	1.00	1.00
nM	M100	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		M	1.000	1.00	1.00	1.00
nM	M100	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		M	1.000	1.00	1.00	1.00
nM	M100	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		M	1.000	1.00	1.00	1.00
nM	M100	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		M	1.000	1.00	1.00	1.00
nM	M100	1	7	Truck emissions	100	0	0	0	73.1				M	0.000	1.00	1.00	0.00
nM	M100	2	7	Truck emissions	100	0	0	0	73.2				M	1.000	1.00	1.00	1.00
nM	M100	3	7	Truck emissions	100	0	0	0	73.2				M	1.000	1.00	1.00	1.00
nM	M100	4	7	Truck emissions	100	0	0	0	73.2				M	1.000	1.00	1.00	1.00
bN	M85	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
nN	M85	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
bN	M85	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
nN	M85	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
bN	M85	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
nN	M85	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
bN	M85	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
nN	M85	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		N	1.000	1.00	1.00	1.00
bN	M85	1	7	Truck emissions	100	0	0	0	73.1				N	1.000	1.00	1.00	1.00
nN	M85	1	7	Truck emissions	100	0	0	0	73.1				N	1.000	1.00	1.00	1.00
bN	M85	2	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00
nN	M85	2	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00
bN	M85	3	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00
nN	M85	3	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00
bN	M85	4	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00
nN	M85	4	7	Truck emissions	100	0	0	0	73.2				N	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
oP	LPG	1	7	Truck fugitives	100	0	0	0	72.1	74.1	72.7		P	1.000	1.00	1.00	1.00
oP	LPG	2	7	Truck fugitives	100	0	0	0	72.1	74.1			P	1.000	1.00	1.00	1.00
oP	LPG	3	7	Truck fugitives	100	0	0	0	72.1	74.1			P	1.000	1.00	1.00	1.00
oP	LPG	4	7	Truck fugitives	100	0	0	0	72.1	74.1			P	1.000	1.00	1.00	1.00
oP	LPG	1	7	Truck emissions	100	0	0	0	73.1				P	1.000	1.00	1.00	1.00
oP	LPG	2	7	Truck emissions	100	0	0	0	73.2				P	1.000	1.00	1.00	1.00
oP	LPG	3	7	Truck emissions	100	0	0	0	73.2				P	1.000	1.00	1.00	1.00
oP	LPG	4	7	Truck emissions	100	0	0	0	73.2				P	1.000	1.00	1.00	1.00
oR	RFG	1	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		R	1.000	1.00	1.00	1.00
oR	RFG	2	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		R	1.000	1.00	1.00	1.00
oR	RFG	3	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		R	1.000	1.00	1.00	1.00
oR	RFG	4	7	Truck fugitives	100	0	0	0	71.2	72.1	74.1		R	1.000	1.00	1.00	1.00
oR	RFG	1	7	Truck emissions	100	0	0	0	73.1				R	1.000	1.00	1.00	1.00
oR	RFG	2	7	Truck emissions	100	0	0	0	73.2				R	1.000	1.00	1.00	1.00
oR	RFG	3	7	Truck emissions	100	0	0	0	73.2				R	1.000	1.00	1.00	1.00
oR	RFG	4	7	Truck emissions	100	0	0	0	73.2				R	1.000	1.00	1.00	1.00
nH	H2	1	7	Compression	18	25	57	0	32.4				xJ	1.430	1.00	1.10	1.30
nC	CNG	1	7	Compress, SC 1990	100	0	0	0	79.1				xJ	1.200	1.00	1.20	1.00
nC	CNG	1	7	Compress CA/US 90	0	25	57	0	79.2				xJ	1.200	1.00	1.20	1.00
nC	CNG	2	7	Compress SC 2010	100	0	0	0	79.3				xJ	1.200	1.00	1.20	1.00
nC	CNG	3	7	Compress SC 2010	100	0	0	0	79.3				xJ	1.000	1.00	1.00	1.00
nC	CNG	4	7	Compress SC 2010	100	0	0	0	79.3				xJ	1.000	1.00	1.00	1.00
nC	CNG	2	7	Compress CA/US 2010	0	23	55	0	79.4				xJ	1.200	1.00	1.20	1.00
nC	CNG	3	7	Compress CA/US 2010	0	23	55	0	79.4				xJ	1.000	1.00	1.00	1.00
nC	CNG	4	7	Compress CA/US 2010	0	23	55	0	79.4				xJ	1.000	1.00	1.00	1.00
nC	CNG	1	8	Fill leaks	100	0	0	0	82.1	82.4			C	1.000	1.00	1.00	1.00
nC	CNG	2	8	Fill leaks	100	0	0	0	82.1	82.4			C	0.800	1.00	0.80	1.00
nC	CNG	3	8	Fill leaks	100	0	0	0	82.1	82.4			C	0.600	1.00	0.60	1.00
nC	CNG	4	8	Fill leaks	100	0	0	0	82.1	82.4			C	0.400	1.00	0.40	1.00
oD	Diese	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			D	1.000	1.00	1.00	1.00
oD	Diese	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			D	1.000	1.00	1.00	1.00
oD	Diese	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			D	1.000	1.00	1.00	1.00
oD	Diese	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			D	0.800	1.00	0.80	1.00
oD	Diese	1	8	Distribution spills	100	0	0	0	82.4				D	1.000	1.00	1.00	1.00
oD	Diese	2	8	Distribution spills	100	0	0	0	82.4				D	1.000	1.00	1.00	1.00
oD	Diese	3	8	Distribution spills	100	0	0	0	82.4				D	0.600	1.00	0.60	1.00
oD	Diese	4	8	Distribution spills	100	0	0	0	82.4				D	0.440	1.00	0.44	1.00
oD	Diese	4	8	Distribution spills	100	0	0	0	82.4				D	0.440	1.00	0.44	1.00
bE	E85	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			E	1.000	1.00	1.00	1.00
bE	E85	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			E	1.000	1.00	1.00	1.00
bE	E85	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			E	1.000	1.00	1.00	1.00
bE	E85	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			E	0.800	1.00	0.80	1.00
bE	E85	1	8	Distribution spills	100	0	0	0	82.4				E	1.000	1.00	1.00	1.00
bE	E85	2	8	Distribution spills	100	0	0	0	82.4				E	1.000	1.00	1.00	1.00
bE	E85	3	8	Distribution spills	100	0	0	0	82.4				E	0.600	1.00	0.60	1.00
bE	E85	4	8	Distribution spills	100	0	0	0	82.4				E	0.440	1.00	0.44	1.00
oG	Gasol	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			G	1.000	1.00	1.00	1.00
oG	Gasol	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			G	1.000	1.00	1.00	1.00
oG	Gasol	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			G	1.000	1.00	1.00	1.00
oG	Gasol	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			G	0.800	1.00	0.80	1.00
oG	Gasol	1	8	Distribution spills	100	0	0	0	82.4				G	1.000	1.00	1.00	1.00
oG	Gasol	2	8	Distribution spills	100	0	0	0	82.4				G	1.000	1.00	1.00	1.00
oG	Gasol	3	8	Distribution spills	100	0	0	0	82.4				G	0.600	1.00	0.60	1.00
nL	LNG	1	8	Fill leaks	100	0	0	0	82.4				L	1.000	1.00	1.00	1.00
nL	LNG	2	8	Fill leaks	100	0	0	0	82.4				L	1.000	1.00	1.00	1.00
nL	LNG	3	8	Fill leaks	100	0	0	0	82.4				L	1.000	1.00	1.00	1.00
nL	LNG	4	8	Fill leaks	100	0	0	0	82.4				L	1.000	1.00	1.00	1.00
nM	M100	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			M	1.000	1.00	1.00	1.00
nM	M100	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			M	1.000	1.00	1.00	1.00
nM	M100	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			M	0.800	1.00	0.80	1.00
nM	M100	1	8	Distribution fugiti	100	0	0	0	82.4				M	1.000	1.00	1.00	1.00
nM	M100	1	8	Distribution spills	100	0	0	0	82.4				M	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
nM	M100	2	8	Distribution spills	100	0	0	0	82.4				M	1.000	1.00	1.00	1.00
nM	M100	3	8	Distribution spills	100	0	0	0	82.4				M	0.600	1.00	0.60	1.00
nM	M100	4	8	Distribution spills	100	0	0	0	82.4				M	0.440	1.00	0.44	1.00
bN	M85	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
nN	M85	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
bN	M85	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
nN	M85	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
bN	M85	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
nN	M85	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	1.000	1.00	1.00	1.00
bN	M85	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	0.800	1.00	0.80	1.00
nN	M85	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			N	0.800	1.00	0.80	1.00
bN	M85	1	8	Distribution spills	100	0	0	0	82.4				N	1.000	1.00	1.00	1.00
nN	M85	1	8	Distribution spills	100	0	0	0	82.4				N	1.000	1.00	1.00	1.00
bN	M85	2	8	Distribution spills	100	0	0	0	82.4				N	1.000	1.00	1.00	1.00
nN	M85	2	8	Distribution spills	100	0	0	0	82.4				N	1.000	1.00	1.00	1.00
bN	M85	3	8	Distribution spills	100	0	0	0	82.4				N	0.600	1.00	0.60	1.00
nN	M85	3	8	Distribution spills	100	0	0	0	82.4				N	0.600	1.00	0.60	1.00
bN	M85	4	8	Distribution spills	100	0	0	0	82.4				N	0.440	1.00	0.44	1.00
nN	M85	4	8	Distribution spills	100	0	0	0	82.4				N	0.440	1.00	0.44	1.00
oP	LPG	3	8	Fueling	100	0	0	0	82.3				P	1.000	1.00	1.00	1.00
oP	LPG	1	8	Fueling, outage	100	0	0	0	82.4	82.7			P	1.000	1.00	1.00	1.00
oP	LPG	2	8	Fueling	100	0	0	0	82.4				P	1.000	1.00	1.00	1.00
oP	LPG	4	8	Fueling	100	0	0	0	82.4				P	1.000	1.00	1.00	1.00
oR	RFG	1	8	Distribution fugiti	100	0	0	0	82.2	82.3			R	1.000	1.00	1.00	1.00
oR	RFG	2	8	Distribution fugiti	100	0	0	0	82.2	82.3			R	1.000	1.00	1.00	1.00
oR	RFG	3	8	Distribution fugiti	100	0	0	0	82.2	82.3			R	1.000	1.00	1.00	1.00
oR	RFG	4	8	Distribution fugiti	100	0	0	0	82.2	82.3			R	0.800	1.00	0.80	1.00
oR	RFG	1	8	Distribution spills	100	0	0	0	82.4				R	1.000	1.00	1.00	1.00
oR	RFG	2	8	Distribution spills	100	0	0	0	82.4				R	1.000	1.00	1.00	1.00
oR	RFG	3	8	Distribution spills	100	0	0	0	82.4				R	0.600	1.00	0.60	1.00
oR	RFG	4	8	Distribution spills	100	0	0	0	82.4				R	0.440	1.00	0.44	1.00
nH	H2	1	8	Distribution fugiti	100	0	0	0	19.9				xJ	0.000	1.00	0.00	0.00
nH	H2	2	8	Distribution	100	0	0	0	19.9				xJ	1.010	1.01	1.00	1.00
nH	H2	3	8	Distribution spills	100	0	0	0	19.9				xJ	0.000	1.01	0.00	0.00
nH	H2	4	8	Distribution spills	100	0	0	0	19.9				xJ	0.000	1.01	0.00	0.00
nH	H2	4	8	Distribution spills	100	0	0	0	19.9				xJ	0.000	1.01	0.00	0.00
xJ	Elec	1	1	Included	0	0	0	0	19.9				xJ	0.000	1.00	1.00	0.00
xJ	Elec	1	2	Coal production	0	0	100	0	39.1				c	0.099	0.11	1.00	0.90
xJ	Elec	1	2	Biomass production	0	100	0	0	39.4				b	0.055	0.05	1.00	1.10
xJ	Elec	1	2	NG production SC	100	0	0	0	39.1				n	0.162	0.18	1.00	0.90
xJ	Elec	1	2	NG production non S	0	15	67	18	39.4				n	0.504	0.56	1.00	0.90
xJ	Elec	1	2	Non-fossil power	0	0	0	0	19.9				xJ	0.000	0.21	1.00	0.00
xJ	Elec	1	3	Ave power 2000 CA	0	25.2	0	0	32.2				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	3	Ave power 2000 SC	17.6	0	0	0	32.1				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	3	Ave power 2000 US	0	0	57.2	0	32.3				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	4	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	5	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	6	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	7	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	1	8	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	1	Included	0	0	0	0	19.9				xJ	0.000	1.00	1.00	0.00
xJ	Elec	2	2	Coal production	0	0	100	0	39.1				c	0.099	0.11	1.00	0.90
xJ	Elec	2	2	Biomass production	0	100	0	0	39.4				b	0.000	0.00	1.00	1.10
xJ	Elec	2	2	NG production SC	100	0	0	0	39.2				n	0.441	0.49	1.00	0.90
xJ	Elec	2	2	NG production non S	0	15	67	18	39.4				n	0.270	0.30	1.00	0.90
xJ	Elec	2	2	Non-fossil power	0	0	0	0	19.9				xJ	0.189	0.21	1.00	0.90
xJ	Elec	2	3	80/20 power 2010 CA	0	21.7	0	0	35.2				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	3	80/20 power 2010 SC	49	0	0	0	35.1				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	3	80/20 power 2010 US	0	0	29.3	0	35.3				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	4	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	5	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	6	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00

CC	Fuel	Sc	Ph		SC	CA	US	ROW	EM1	EM2	EM3	EM4	FC	PhWt	A	CD	Use
xJ	Elec	2	7	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	2	8	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	1	Included	0	0	0	0	19.9				xJ	0.000	1.00	1.00	0.00
xJ	Elec	3	2	Coal production	0	0	100	0	39.1				c	0.099	0.11	1.00	0.90
xJ	Elec	3	2	Biomass production	0	100	0	0	39.4				b	0.000	0.00	1.00	1.10
xJ	Elec	3	2	NG production SC	100	0	0	0	39.2				n	0.522	0.58	1.00	0.90
xJ	Elec	3	2	NG production non S	0	15	67	18	39.4				n	0.189	0.21	1.00	0.90
xJ	Elec	3	2	Non-fossil power	0	0	0	0	19.9				xJ	0.189	0.21	1.00	0.90
xJ	Elec	3	3	95/5 power 2010 CA	0	17.9	0	0	36.2				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	3	95/5 power 2010 SC	57.7	0	0	0	36.1				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	3	95/5 power 2010 US	0	0	24.4	0	36.3				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	4	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	5	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	6	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	7	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	3	8	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	1	Included	0	0	0	0	19.9				xJ	0.000	1.00	1.00	0.00
xJ	Elec	4	2	Coal production	0	0	100	0	39.1				c	0.099	0.11	1.00	0.90
xJ	Elec	4	2	Biomass production	0	100	0	0	39.4				b	0.000	0.00	1.00	1.10
xJ	Elec	4	2	NG production SC	100	0	0	0	39.2				n	0.522	0.58	1.00	0.90
xJ	Elec	4	2	NG production non S	0	15	67	18	39.4				n	0.189	0.21	1.00	0.90
xJ	Elec	4	2	Non-fossil power	0	0	0	0	19.9				xJ	0.189	0.21	1.00	0.90
xJ	Elec	4	3	95/5 power 2010 CA	0	17.9	0	0	36.2				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	3	95/5 power 2010 SC	57.7	0	0	0	36.1				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	3	95/5 power 2010 US	0	0	24.4	0	36.3				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	4	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	5	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	6	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	7	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00
xJ	Elec	4	8	ZEV	0	0	0	0	19.9				xJ	1.000	1.00	1.00	1.00

FUEL	FEEDSTOCK	CC	SC	PH	NMOG_SC	NMOG_CA	NMOG_US	NMOG_RW	CH4_SC	CH4_CA	CH4_US	CH4_RW	NOX_SC	NOX_CA	NOX_US	NOX_RW	CO_SC
E85	Biomass	bE	1	1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	1	2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	1	3	2.08362	0.09078	0.09078	0.27234	5.10472	0.00510	0.00510	0.01530	1.28952	0.03335	0.03335	0.10006	0.56129
E85	Biomass	bE	1	4	0.02075	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	1	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	1	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	1	7	0.06930	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.15064	0.00000	0.00000	0.00000	0.07051
E85	Biomass	bE	1	8	0.76240	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	2	1	0.00000	0.00000	2.60871	0.00000	0.00000	0.00000	0.00786	0.00000	0.00000	0.00000	7.30658	0.00000	0.00000
E85	Biomass	bE	2	2	0.00000	0.00000	0.08081	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.44685	0.00000	0.00000
E85	Biomass	bE	2	3	0.10812	0.09078	1.93854	0.27234	0.05270	0.00510	4.98593	0.01530	0.06120	0.03335	2.41496	0.10006	0.01360
E85	Biomass	bE	2	4	0.00340	0.00000	0.00340	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	2	5	0.01163	0.01163	0.86036	0.00000	0.00000	0.00000	0.00000	0.00000	0.10173	0.10173	7.52828	0.00000	0.01889
E85	Biomass	bE	2	6	0.01346	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	2	7	0.06930	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
E85	Biomass	bE	2	8	0.76240	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	3	1	0.00000	1.22729	0.00591	0.00000	0.00000	0.00561	0.00575	0.00000	0.00000	7.04047	0.03483	0.00000	0.00000
E85	Biomass	bE	3	2	0.00000	0.04041	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.22342	0.00000	0.00000	0.00000
E85	Biomass	bE	3	3	0.10812	0.95152	-0.09034	0.27234	0.05270	2.54147	-0.17112	0.01530	0.06120	0.53188	-1.03376	0.10006	0.01360
E85	Biomass	bE	3	4	0.00180	0.00180	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	3	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	3	6	0.01346	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	3	7	0.06930	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
E85	Biomass	bE	3	8	0.64720	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	4	1	0.00000	1.22729	0.00591	0.00000	0.00000	0.00561	0.00575	0.00000	0.00000	7.04047	0.03483	0.00000	0.00000
E85	Biomass	bE	4	2	0.00000	0.04041	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.22342	0.00000	0.00000	0.00000
E85	Biomass	bE	4	3	0.10812	0.16634	-0.09034	0.27234	0.05270	0.40007	-0.17112	0.01530	0.06120	0.53188	-1.03376	0.10006	0.01360
E85	Biomass	bE	4	4	0.00034	0.00034	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	4	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	4	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
E85	Biomass	bE	4	7	0.06930	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
E85	Biomass	bE	4	8	0.50624	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	1	1	0.00000	0.85838	0.00496	0.00000	0.00000	0.00424	0.00446	0.00000	0.00000	5.06846	0.02864	0.00000	0.00000
M85	Biomass	bN	1	2	0.00000	0.03170	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.43827	0.00000	0.00000	0.00000
M85	Biomass	bN	1	3	0.16764	2.73705	0.14695	0.21146	0.06204	5.96261	0.07270	0.01188	0.04158	2.12284	0.46704	0.07770	0.03036
M85	Biomass	bN	1	4	0.00000	0.01476	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	1	5	0.01090	0.20001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.15064	2.41024	0.00000	0.00000	0.07051
M85	Biomass	bN	1	6	0.05751	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	1	7	0.06490	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.15064	0.00000	0.00000	0.00000	0.07051
M85	Biomass	bN	1	8	0.64470	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	2	1	0.00000	0.72367	0.00230	0.00000	0.00000	0.00236	0.00224	0.00000	0.00000	4.15120	0.01355	0.00000	0.00000
M85	Biomass	bN	2	2	0.00000	0.02957	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.16353	0.00000	0.00000	0.00000

CC	SC	PH	CO_CA	CO_US	CO_RW	CO2_SC	CO2_CA	CO2_US	CO2_RW	BTU_SC	BTU_CA	BTU_US	BTU_RW	VMIR_SC	VMOR_SC
bE	1	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
bE	1	2	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
bE	1	3	0.00170	0.00170	0.00510	1988.934	6.052	6.052	18.156	36705.48	97.27	97.27	291.82	1.53143	0.94570
bE	1	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.61	0.00	0.00	0.00	0.02781	0.01494
bE	1	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
bE	1	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
bE	1	7	0.00000	0.00000	0.00000	12.839	0.000	0.000	0.000	168.46	0.00	0.00	0.00	0.10712	0.05601
bE	1	8	0.00000	0.00000	0.00000	0.234	0.000	0.000	0.000	23.45	0.00	0.00	0.00	1.01076	0.57173
bE	2	1	0.00000	51.50012	0.00000	0.000	0.000	917.430	0.000	0.00	0.00	13555.64	0.00	0.00000	0.00000
bE	2	2	0.00000	0.52291	0.00000	0.000	0.000	95.074	0.000	0.00	0.00	1328.00	0.00	0.00000	0.00000
bE	2	3	0.00170	1.05958	0.00510	142.460	6.052	1944.169	18.156	2526.54	97.27	15984.57	291.82	0.11960	0.06789
bE	2	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.10	0.00	0.10	0.00	0.00456	0.00245
bE	2	5	0.01889	1.39812	0.00000	9.984	9.984	738.846	0.000	133.71	133.71	9894.28	0.00	0.03241	0.01307
bE	2	6	0.00000	0.00000	0.00000	0.004	0.000	0.000	0.000	0.41	0.00	0.00	0.00	0.01669	0.01003
bE	2	7	0.00000	0.00000	0.00000	12.839	0.000	0.000	0.000	168.46	0.00	0.00	0.00	0.10712	0.05601
bE	2	8	0.00000	0.00000	0.00000	0.234	0.000	0.000	0.000	23.45	0.00	0.00	0.00	1.01076	0.57173
bE	3	1	15.69087	0.00543	0.00000	0.000	529.951	14.476	0.000	0.00	7326.30	287.60	0.00	0.00000	0.00000
bE	3	2	0.26145	0.00000	0.00000	0.000	47.537	0.000	0.000	0.00	664.00	0.00	0.00	0.00000	0.00000
bE	3	3	0.41418	-0.16473	0.00510	142.460	-356.801	-437.435	18.156	2526.54	-6932.96	-8713.73	291.82	0.11960	0.06789
bE	3	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.05	0.05	0.00	0.00	0.00242	0.00130
bE	3	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
bE	3	6	0.00000	0.00000	0.00000	0.004	0.000	0.000	0.000	0.41	0.00	0.00	0.00	0.01669	0.01003
bE	3	7	0.00000	0.00000	0.00000	12.839	0.000	0.000	0.000	168.46	0.00	0.00	0.00	0.10712	0.05601
bE	3	8	0.00000	0.00000	0.00000	0.199	0.000	0.000	0.000	19.91	0.00	0.00	0.00	0.84176	0.48441
bE	4	1	15.69087	0.00543	0.00000	0.000	529.951	14.476	0.000	0.00	7326.30	287.60	0.00	0.00000	0.00000
bE	4	2	0.26145	0.00000	0.00000	0.000	47.537	0.000	0.000	0.00	664.00	0.00	0.00	0.00000	0.00000
bE	4	3	0.41418	-0.16473	0.00510	142.460	-356.801	-437.435	18.156	2526.54	-7078.00	-8713.73	291.82	0.11960	0.06789
bE	4	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.01	0.01	0.00	0.00	0.00046	0.00025
bE	4	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
bE	4	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
bE	4	7	0.00000	0.00000	0.00000	12.839	0.000	0.000	0.000	168.46	0.00	0.00	0.00	0.10712	0.05601
bE	4	8	0.00000	0.00000	0.00000	0.156	0.000	0.000	0.000	15.57	0.00	0.00	0.00	0.65650	0.37879
bN	1	1	10.63143	0.00437	0.00000	0.000	377.937	11.410	0.000	0.00	5211.77	214.83	0.00	0.00000	0.00000
bN	1	2	0.20515	0.00000	0.00000	0.000	37.300	0.000	0.000	0.00	521.00	0.00	0.00	0.00000	0.00000
bN	1	3	0.92436	0.06859	0.00396	104.808	1383.358	180.421	14.098	1815.53	24835.30	3384.11	226.59	0.18515	0.10506
bN	1	4	0.00000	0.00000	0.00000	0.000	0.021	0.000	0.000	0.00	0.33	0.00	0.00	0.00000	0.00000
bN	1	5	1.12816	0.00000	0.00000	12.821	205.172	0.000	0.000	166.67	2667.28	0.00	0.00	0.03039	0.01225
bN	1	6	0.00000	0.00000	0.00000	0.089	0.000	0.000	0.000	1.40	0.00	0.00	0.00	0.07016	0.03767
bN	1	7	0.00000	0.00000	0.00000	12.906	0.000	0.000	0.000	167.99	0.00	0.00	0.00	0.08802	0.04203
bN	1	8	0.00000	0.00000	0.00000	1.009	0.000	0.000	0.000	15.76	0.00	0.00	0.00	0.66154	0.33761
bN	2	1	9.26331	0.00211	0.00000	0.000	310.454	5.631	0.000	0.00	4277.29	111.87	0.00	0.00000	0.00000
bN	2	2	0.19137	0.00000	0.00000	0.000	34.794	0.000	0.000	0.00	486.00	0.00	0.00	0.00000	0.00000

FUEL	FEEDSTOCK	CC	SC	PH	NMOG_SC	NMOG_CA	NMOG_US	NMOG_RW	CH4_SC	CH4_CA	CH4_US	CH4_RW	NOX_SC	NOX_CA	NOX_US	NOX_RW	CO_SC
M85	Biomass	bN	2	3	0.08395	1.16241	0.16500	0.21146	0.04092	2.84179	0.09591	0.01188	0.04752	0.58564	0.58272	0.07770	0.01056
M85	Biomass	bN	2	4	0.00547	0.00547	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	2	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	2	6	0.01129	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	2	7	0.06490	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
M85	Biomass	bN	2	8	0.64470	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	3	1	0.00000	0.72367	0.00230	0.00000	0.00000	0.00236	0.00224	0.00000	0.00000	4.15120	0.01355	0.00000	0.00000
M85	Biomass	bN	3	2	0.00000	0.02957	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.16353	0.00000	0.00000	0.00000
M85	Biomass	bN	3	3	0.08395	1.16483	0.16500	0.21146	0.04092	2.84839	0.09591	0.01188	0.04752	0.58564	0.58272	0.07770	0.01056
M85	Biomass	bN	3	4	0.00290	0.00290	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	3	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	3	6	0.01129	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	3	7	0.06490	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
M85	Biomass	bN	3	8	0.52950	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	4	1	0.00000	0.64177	0.00230	0.00000	0.00000	0.00236	0.00224	0.00000	0.00000	3.33473	0.01355	0.00000	0.00000
M85	Biomass	bN	4	2	0.00000	0.02957	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.16353	0.00000	0.00000	0.00000
M85	Biomass	bN	4	3	0.08395	1.16241	0.16500	0.21146	0.04092	2.84179	0.09591	0.01188	0.04752	0.58564	0.58272	0.07770	0.01056
M85	Biomass	bN	4	4	0.00055	0.00055	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	4	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	4	6	0.00213	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Biomass	bN	4	7	0.06490	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
M85	Biomass	bN	4	8	0.41208	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	1	1	0.00522	0.00000	0.01566	0.00522	0.05278	0.00000	0.15834	0.05278	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	1	2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	1	3	0.01373	0.06863	0.17568	0.01647	0.13878	0.69388	1.77632	0.16653	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	1	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	1	5	0.04015	0.20075	0.51436	0.04818	0.40577	2.02885	5.19835	0.48692	0.00576	0.09146	0.24146	0.02195	0.00824
CNG	Natural Gas	nC	1	6	0.03600	0.00000	0.00000	0.00000	0.36400	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	1	7	0.47856	0.04500	0.10260	0.00000	4.68516	0.12000	0.27360	0.00000	0.09748	0.32700	0.74556	0.00000	0.05076
CNG	Natural Gas	nC	1	8	0.01810	0.00000	0.00000	0.00000	0.27690	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	2	1	0.00000	0.00000	0.01305	0.01305	0.00000	0.00000	0.13195	0.13195	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	2	2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	2	3	0.00000	0.00000	0.13725	0.13725	0.00000	0.00000	1.38775	1.38775	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	2	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	2	5	0.03236	0.13793	0.58409	0.05692	0.32729	1.39507	5.90756	0.57568	0.00137	0.03105	0.13095	0.01350	0.00900
CNG	Natural Gas	nC	2	6	0.03600	0.00000	0.00000	0.00000	0.36400	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	2	7	0.47364	0.04140	0.09900	0.00000	4.80600	0.11040	0.26400	0.00000	0.09600	0.30084	0.71940	0.00000	0.05436
CNG	Natural Gas	nC	2	8	0.01448	0.00000	0.00000	0.00000	0.22152	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	3	1	0.00000	0.00000	0.01305	0.01305	0.00000	0.00000	0.13195	0.13195	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	3	2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	3	3	0.00000	0.00000	0.13725	0.13725	0.00000	0.00000	1.38775	1.38775	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	3	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CC	SC	PH	CO_CA	CO_US	CO_RW	CO2_SC	CO2_CA	CO2_US	CO2_RW	BTU_SC	BTU_CA	BTU_US	BTU_RW	VMIR_SC	VMOR_SC
bN	2	3	0.10709	0.08816	0.00396	110.616	204.468	236.110	14.098	1961.78	4024.11	4673.09	226.59	0.09287	0.05271
bN	2	4	0.00000	0.00000	0.00000	0.008	0.008	0.000	0.000	0.12	0.12	0.00	0.00	0.00306	0.00153
bN	2	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
bN	2	6	0.00000	0.00000	0.00000	0.017	0.000	0.000	0.000	0.28	0.00	0.00	0.00	0.01377	0.00739
bN	2	7	0.00000	0.00000	0.00000	12.906	0.000	0.000	0.000	167.99	0.00	0.00	0.00	0.08802	0.04203
bN	2	8	0.00000	0.00000	0.00000	1.009	0.000	0.000	0.000	15.76	0.00	0.00	0.00	0.66154	0.33761
bN	3	1	9.26331	0.00211	0.00000	0.000	310.454	5.631	0.000	0.00	4277.29	111.87	0.00	0.00000	0.00000
bN	3	2	0.19137	0.00000	0.00000	0.000	34.794	0.000	0.000	0.00	486.00	0.00	0.00	0.00000	0.00000
bN	3	3	0.10709	0.08816	0.00396	110.616	204.493	236.110	14.098	1961.78	4024.56	4673.09	226.59	0.09287	0.05271
bN	3	4	0.00000	0.00000	0.00000	0.004	0.004	0.000	0.000	0.06	0.06	0.00	0.00	0.00162	0.00081
bN	3	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
bN	3	6	0.00000	0.00000	0.00000	0.017	0.000	0.000	0.000	0.28	0.00	0.00	0.00	0.01377	0.00739
bN	3	7	0.00000	0.00000	0.00000	12.906	0.000	0.000	0.000	167.99	0.00	0.00	0.00	0.08802	0.04203
bN	3	8	0.00000	0.00000	0.00000	0.829	0.000	0.000	0.000	12.94	0.00	0.00	0.00	0.57099	0.29602
bN	4	1	9.01095	0.00211	0.00000	0.000	258.496	5.631	0.000	0.00	3583.28	111.87	0.00	0.00000	0.00000
bN	4	2	0.19137	0.00000	0.00000	0.000	34.794	0.000	0.000	0.00	486.00	0.00	0.00	0.00000	0.00000
bN	4	3	0.10709	0.08816	0.00396	110.616	204.468	236.110	14.098	1961.78	4024.11	4673.09	226.59	0.09287	0.05271
bN	4	4	0.00000	0.00000	0.00000	0.001	0.001	0.000	0.000	0.01	0.01	0.00	0.00	0.00031	0.00015
bN	4	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
bN	4	6	0.00000	0.00000	0.00000	0.003	0.000	0.000	0.000	0.05	0.00	0.00	0.00	0.00260	0.00140
bN	4	7	0.00000	0.00000	0.00000	12.906	0.000	0.000	0.000	167.99	0.00	0.00	0.00	0.08802	0.04203
bN	4	8	0.00000	0.00000	0.00000	0.644	0.000	0.000	0.000	10.08	0.00	0.00	0.00	0.44774	0.23266
nC	1	1	0.00000	0.00000	0.00000	0.157	0.000	0.470	0.157	2.88	0.00	8.63	2.88	0.00543	0.00340
nC	1	2	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nC	1	3	0.00000	0.00000	0.00000	0.412	2.061	5.275	0.495	7.56	37.82	96.82	9.08	0.01427	0.00894
nC	1	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nC	1	5	0.04119	0.10877	0.00989	3.530	17.652	46.131	4.237	63.57	317.89	830.61	76.29	0.02274	0.01500
nC	1	6	0.00000	0.00000	0.00000	1.081	0.000	0.000	0.000	19.84	0.00	0.00	0.00	0.02036	0.01354
nC	1	7	0.05100	0.11628	0.00000	143.219	135.900	309.852	0.000	11049.98	2700.00	6156.00	0.00	0.31475	0.19435
nC	1	8	0.00000	0.00000	0.00000	0.797	0.000	0.000	0.000	14.64	0.00	0.00	0.00	0.01163	0.00775
nC	2	1	0.00000	0.00000	0.00000	0.000	0.000	0.392	0.392	0.00	0.00	7.19	7.19	0.00000	0.00000
nC	2	2	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nC	2	3	0.00000	0.00000	0.00000	0.000	0.000	4.121	4.121	0.00	0.00	75.64	75.64	0.00000	0.00000
nC	2	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nC	2	5	0.04140	0.17460	0.01800	3.327	14.975	63.224	6.419	59.95	269.76	1138.97	115.60	0.01834	0.01209
nC	2	6	0.00000	0.00000	0.00000	1.081	0.000	0.000	0.000	19.84	0.00	0.00	0.00	0.02036	0.01354
nC	2	7	0.04692	0.11220	0.00000	348.419	125.028	298.980	0.000	11049.98	2484.00	5940.00	0.00	0.30536	0.19107
nC	2	8	0.00000	0.00000	0.00000	0.638	0.000	0.000	0.000	11.71	0.00	0.00	0.00	0.00930	0.00620
nC	3	1	0.00000	0.00000	0.00000	0.000	0.000	0.392	0.392	0.00	0.00	7.19	7.19	0.00000	0.00000
nC	3	2	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nC	3	3	0.00000	0.00000	0.00000	0.000	0.000	4.121	4.121	0.00	0.00	75.64	75.64	0.00000	0.00000
nC	3	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000

FUEL	FEEDSTOCK	CC	SC	PH	NMOG_SC	NMOG_CA	NMOG_US	NMOG_RW	CH4_SC	CH4_CA	CH4_US	CH4_RW	NOX_SC	NOX_CA	NOX_US	NOX_RW	CO_SC
CNG	Natural Gas	nC	3	5	0.03236	0.13793	0.58409	0.05692	0.32729	1.39507	5.90756	0.57568	0.00137	0.03105	0.13095	0.01350	0.00900
CNG	Natural Gas	nC	3	6	0.03600	0.00000	0.00000	0.00000	0.36400	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	3	7	0.47030	0.03450	0.08250	0.00000	4.76940	0.09200	0.22000	0.00000	0.08000	0.25070	0.59950	0.00000	0.04530
CNG	Natural Gas	nC	3	8	0.01086	0.00000	0.00000	0.00000	0.16614	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	4	1	0.00000	0.00000	0.01305	0.01305	0.00000	0.00000	0.13195	0.13195	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	4	2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	4	3	0.00000	0.00000	0.13725	0.13725	0.00000	0.00000	1.38775	1.38775	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	4	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	4	5	0.01988	0.08487	0.35936	0.03507	0.20105	0.85857	3.63533	0.35477	0.00137	0.03105	0.13095	0.01350	0.00900
CNG	Natural Gas	nC	4	6	0.03600	0.00000	0.00000	0.00000	0.36400	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
CNG	Natural Gas	nC	4	7	0.47030	0.03450	0.08250	0.00000	4.76940	0.09200	0.22000	0.00000	0.08000	0.25070	0.59950	0.00000	0.04530
CNG	Natural Gas	nC	4	8	0.00724	0.00000	0.00000	0.00000	0.11076	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	1	1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	1	2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	1	3	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	1	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	1	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	1	6	0.00000	0.00000	0.00000	0.00000	0.04813	0.06685	0.15242	0.00000	0.30888	0.42900	0.97812	0.00000	0.04710
H2	Natural Gas	nH	1	7	0.05354	0.07436	0.16954	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	1	8	0.00000	0.00000	0.00000	0.00000	0.54040	0.00000	0.00000	5.46400	5.46400	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	2	1	0.00000	0.00000	0.54040	0.00405	0.00000	0.09148	0.38583	0.03978	0.00000	0.12419	0.52375	0.05399	0.00000
H2	Natural Gas	nH	2	2	0.00000	0.00931	0.03928	0.00000	0.00000	0.48517	0.44996	0.00000	0.00000	3.02168	2.72473	0.00000	0.00000
H2	Natural Gas	nH	2	3	0.00000	0.49009	0.46245	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	2	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	2	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	2	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.03956	0.03956	0.00000	0.00000	0.04629
H2	Natural Gas	nH	2	7	0.00715	0.00715	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	2	8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00275	0.00260	0.00000	0.00000	4.83016	0.01577	0.00000	0.00000
H2	Natural Gas	nH	3	1	0.00000	0.84164	0.00268	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.19045	0.00000	0.00000	0.00000
H2	Natural Gas	nH	3	2	0.00000	0.03444	0.00000	0.00000	0.00000	0.61669	0.61794	0.00000	0.00000	3.06261	3.74196	0.00000	0.00000
H2	Natural Gas	nH	3	3	0.00000	0.63073	0.63510	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	3	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	3	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	3	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.03956	0.03956	0.00000	0.00000	0.04629
H2	Natural Gas	nH	3	7	0.00715	0.00715	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	3	8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00275	0.00260	0.00000	0.00000	4.83016	0.01577	0.00000	0.00000
H2	Natural Gas	nH	4	1	0.00000	0.84164	0.00268	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.19045	0.00000	0.00000	0.00000
H2	Natural Gas	nH	4	2	0.00000	0.03444	0.00000	0.00000	0.00000	0.61669	0.61794	0.00000	0.00000	3.06261	3.74196	0.00000	0.00000
H2	Natural Gas	nH	4	3	0.00000	0.63073	0.63510	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	4	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	4	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
H2	Natural Gas	nH	4	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CC	SC	PH	CO_CA	CO_US	CO_RW	CO2_SC	CO2_CA	CO2_US	CO2_RW	BTU_SC	BTU_CA	BTU_US	BTU_RW	VMIR_SC	VMOR_SC
nC	3	5	0.04140	0.17460	0.01800	3.327	14.975	63.224	6.419	59.95	269.76	1138.97	115.60	0.01834	0.01209
nC	3	6	0.00000	0.00000	0.00000	1.081	0.000	0.000	0.000	19.84	0.00	0.00	0.00	0.02036	0.01354
nC	3	7	0.03910	0.09350	0.00000	292.619	104.190	249.150	0.000	9249.98	2070.00	4950.00	0.00	0.29723	0.18766
nC	3	8	0.00000	0.00000	0.00000	0.478	0.000	0.000	0.000	8.78	0.00	0.00	0.00	0.00698	0.00465
nC	4	1	0.00000	0.00000	0.00000	0.000	0.000	0.392	0.392	0.00	0.00	7.19	7.19	0.00000	0.00000
nC	4	2	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nC	4	3	0.00000	0.00000	0.00000	0.000	0.000	4.121	4.121	0.00	0.00	75.64	75.64	0.00000	0.00000
nC	4	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nC	4	5	0.04140	0.17460	0.01800	2.952	13.382	56.477	5.763	53.07	240.51	1015.12	103.56	0.01128	0.00739
nC	4	6	0.00000	0.00000	0.00000	1.081	0.000	0.000	0.000	19.84	0.00	0.00	0.00	0.02036	0.01354
nC	4	7	0.03910	0.09350	0.00000	292.619	104.190	249.150	0.000	9249.98	2070.00	4950.00	0.00	0.29723	0.18766
nC	4	8	0.00000	0.00000	0.00000	0.319	0.000	0.000	0.000	5.86	0.00	0.00	0.00	0.00465	0.00310
nH	1	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	1	2	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	1	3	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	1	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	1	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	1	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	1	7	0.06542	0.14916	0.00000	123.037	170.885	389.618	0.000	2316.60	3217.50	7335.90	0.00	0.12235	0.04931
nH	1	8	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	2	1	0.00000	0.00000	0.00000	0.000	0.000	16.225	16.225	0.00	0.00	297.82	297.82	0.00000	0.00000
nH	2	2	0.05485	0.23132	0.02385	0.000	9.583	40.416	4.167	0.00	165.58	698.33	71.99	0.00000	0.00000
nH	2	3	1.24040	0.42496	0.00000	0.000	4095.926	1132.387	0.000	0.00	76583.25	22497.75	0.00	0.00000	0.00000
nH	2	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	2	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	2	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	2	7	0.04629	0.00000	0.00000	8.416	8.416	0.000	0.000	109.41	109.41	0.00	0.00	0.01994	0.00804
nH	2	8	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	3	1	10.76837	0.00246	0.00000	0.000	361.210	6.553	0.000	0.00	4976.56	130.19	0.00	0.00000	0.00000
nH	3	2	0.22287	0.00000	0.00000	0.000	40.521	0.000	0.000	0.00	566.00	0.00	0.00	0.00000	0.00000
nH	3	3	1.32590	0.58361	0.00000	0.000	1272.391	1555.144	0.000	0.00	25279.29	30896.91	0.00	0.00000	0.00000
nH	3	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	3	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	3	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	3	7	0.04629	0.00000	0.00000	8.416	8.416	0.000	0.000	109.41	109.41	0.00	0.00	0.01994	0.00804
nH	3	8	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	4	1	10.76837	0.00246	0.00000	0.000	361.210	6.553	0.000	0.00	4976.56	130.19	0.00	0.00000	0.00000
nH	4	2	0.22287	0.00000	0.00000	0.000	40.521	0.000	0.000	0.00	566.00	0.00	0.00	0.00000	0.00000
nH	4	3	1.32590	0.58361	0.00000	0.000	1272.391	1555.144	0.000	0.00	25279.29	30896.91	0.00	0.00000	0.00000
nH	4	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	4	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nH	4	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000

FUEL	FEEDSTOCK	CC	SC	PH	NMOG_SC	NMOG_CA	NMOG_US	NMOG_RW	CH4_SC	CH4_CA	CH4_US	CH4_RW	NOX_SC	NOX_CA	NOX_US	NOX_RW	CO_SC
H2	Natural Gas	nH	4	7	0.00715	0.00715	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.03956	0.03956	0.00000	0.00000	0.04629
H2	Natural Gas	nH	4	8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	1	1	0.00000	0.00000	1.18899	0.00000	0.00000	0.00000	12.02201	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	1	2	0.00000	0.00000	0.00456	0.00000	0.00000	0.00000	0.04544	0.00000	0.00000	0.00000	0.07623	0.00000	0.00000
LNG	Natural Gas	nL	1	3	0.00000	0.00000	0.00052	0.00000	0.00000	0.00000	0.00040	0.00000	0.00000	0.00000	0.05040	0.00000	0.00000
LNG	Natural Gas	nL	1	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	1	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	1	6	0.00000	0.00000	1.13000	0.00000	0.00000	0.00000	8.87000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	1	7	0.64496	0.00708	0.28320	0.00000	5.16082	0.00000	0.00000	0.00000	0.09792	0.09792	3.91680	0.00000	0.04583
LNG	Natural Gas	nL	1	8	0.01020	0.00000	0.00000	0.00000	0.08000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	2	1	0.00000	0.00000	0.59450	0.59450	0.00000	0.00000	6.01101	6.01101	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	2	2	0.00000	0.00569	0.02401	0.00248	0.00000	0.05693	0.24008	0.02475	0.00000	0.02277	0.09603	0.00990	0.00000
LNG	Natural Gas	nL	2	3	0.00000	0.09603	0.00407	0.00000	0.00000	0.93024	0.00396	0.00000	0.00000	0.39042	0.02398	0.00000	0.00000
LNG	Natural Gas	nL	2	4	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	2	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	2	6	0.00000	1.13000	0.00000	0.00000	0.00000	8.87000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	2	7	0.01246	0.00708	0.00000	0.00000	0.04332	0.00000	0.00000	0.03917	0.03917	0.00000	0.00000	0.04583
LNG	Natural Gas	nL	2	8	0.01020	0.00000	0.00000	0.00000	0.08000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	3	1	0.00000	0.00000	0.56747	0.56747	0.00000	0.00000	5.73778	5.73778	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	3	2	0.00000	0.00543	0.02292	0.00236	0.00000	0.05434	0.22916	0.02363	0.00000	0.02174	0.09167	0.00945	0.00000
LNG	Natural Gas	nL	3	3	0.00000	0.08568	0.00407	0.00000	0.00000	0.82674	0.00396	0.00000	0.00000	0.34902	0.02398	0.00000	0.00000
LNG	Natural Gas	nL	3	4	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	3	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	3	6	0.00000	1.13000	0.00000	0.00000	0.00000	8.87000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	3	7	0.01246	0.00708	0.00000	0.00000	0.04332	0.00000	0.00000	0.00000	0.03917	0.03917	0.00000	0.00000	0.04583
LNG	Natural Gas	nL	3	8	0.01020	0.00000	0.00000	0.00000	0.08000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	4	1	0.00000	0.00000	0.56747	0.56747	0.00000	0.00000	5.73778	5.73778	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	4	2	0.00000	0.00554	0.02338	0.00241	0.00000	0.05651	0.23833	0.02458	0.00000	0.03261	0.13750	0.01418	0.00000
LNG	Natural Gas	nL	4	3	0.00000	0.08568	0.00407	0.00000	0.00000	0.82674	0.00396	0.00000	0.00000	0.34902	0.02398	0.00000	0.00000
LNG	Natural Gas	nL	4	4	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	4	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	4	6	0.00000	1.13000	0.00000	0.00000	0.00000	8.87000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LNG	Natural Gas	nL	4	7	0.01246	0.00708	0.00000	0.00000	0.04332	0.00000	0.00000	0.00000	0.03917	0.03917	0.00000	0.00000	0.04583
LNG	Natural Gas	nL	4	8	0.01020	0.00000	0.00000	0.00000	0.08000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	1	1	0.00000	0.00000	0.00000	1.01713	0.00000	0.00000	0.00000	10.28428	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	1	2	0.00000	0.00000	0.00000	0.00389	0.00000	0.00000	0.00000	0.03887	0.00000	0.00000	0.00000	0.06521	0.00000
M100	Natural Gas	nM	1	3	0.00000	0.00000	0.00000	2.23403	0.00000	0.00000	0.00000	6.00609	0.00000	0.00000	0.00000	1.37108	0.00000
M100	Natural Gas	nM	1	4	0.00000	0.00000	0.00000	0.00630	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	1	5	0.00198	0.01350	0.01075	0.00123	0.00000	0.00000	0.00000	0.00000	0.01974	0.23625	0.18813	0.00661	0.00267
M100	Natural Gas	nM	1	6	0.01701	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	1	7	0.02950	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	1	8	0.42200	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CC	SC	PH	CO_CA	CO_US	CO_RW	CO2_SC	CO2_CA	CO2_US	CO2_RW	BTU_SC	BTU_CA	BTU_US	BTU_RW	VMIR_SC	VMOR_SC
nH	4	7	0.04629	0.00000	0.00000	8.416	8.416	0.000	0.000	109.41	109.41	0.00	0.00	0.01994	0.00804
nH	4	8	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nL	1	1	0.00000	0.00000	0.00000	0.000	0.000	35.699	0.000	0.00	0.00	655.26	0.00	0.00000	0.00000
nL	1	2	0.00000	0.03446	0.00000	0.000	0.000	10.514	0.000	0.00	0.00	188.10	0.00	0.00000	0.00000
nL	1	3	0.00000	0.00292	0.00000	0.000	0.000	24.360	0.000	0.00	0.00	360.00	0.00	0.00000	0.00000
nL	1	4	0.00000	0.00000	0.00000	0.000	0.000	2.775	0.000	0.00	0.00	50.93	0.00	0.00000	0.00000
nL	1	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nL	1	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nL	1	7	0.04583	1.83320	0.00000	24.020	8.333	333.320	0.000	403.66	108.33	4333.20	0.00	0.36148	0.23499
nL	1	8	0.00000	0.00000	0.00000	0.244	0.000	0.000	0.000	4.59	0.00	0.00	0.00	0.00543	0.00361
nL	2	1	0.00000	0.00000	0.00000	0.000	0.000	17.850	17.850	0.00	0.00	327.63	327.63	0.00000	0.00000
nL	2	2	0.03416	0.14405	0.01485	0.000	5.271	22.231	2.292	0.00	91.08	384.12	39.60	0.00000	0.00000
nL	2	3	0.55926	0.00374	0.00000	0.000	93.994	9.966	0.000	0.00	1645.20	198.00	0.00	0.00000	0.00000
nL	2	4	0.00000	0.00000	0.00000	0.000	2.775	0.000	0.000	0.00	50.93	0.00	0.00	0.00000	0.00000
nL	2	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nL	2	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nL	2	7	0.04583	0.00000	0.00000	8.465	8.333	0.000	0.000	110.81	108.33	0.00	0.00	0.02262	0.00987
nL	2	8	0.00000	0.00000	0.00000	0.244	0.000	0.000	0.000	4.59	0.00	0.00	0.00	0.00543	0.00361
nL	3	1	0.00000	0.00000	0.00000	0.000	0.000	17.038	17.038	0.00	0.00	312.74	312.74	0.00000	0.00000
nL	3	2	0.03260	0.13750	0.01418	0.000	5.032	21.220	2.188	0.00	86.94	366.66	37.80	0.00000	0.00000
nL	3	3	0.49716	0.00374	0.00000	0.000	84.410	9.966	0.000	0.00	1479.60	198.00	0.00	0.00000	0.00000
nL	3	4	0.00000	0.00000	0.00000	0.000	2.775	0.000	0.000	0.00	50.93	0.00	0.00	0.00000	0.00000
nL	3	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nL	3	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nL	3	7	0.04583	0.00000	0.00000	8.465	8.333	0.000	0.000	110.81	108.33	0.00	0.00	0.02262	0.00987
nL	3	8	0.00000	0.00000	0.00000	0.244	0.000	0.000	0.000	4.59	0.00	0.00	0.00	0.00543	0.00361
nL	4	1	0.00000	0.00000	0.00000	0.000	0.000	17.038	17.038	0.00	0.00	312.74	312.74	0.00000	0.00000
nL	4	2	0.04347	0.18333	0.01891	0.000	11.542	48.674	5.018	0.00	206.48	870.82	89.78	0.00000	0.00000
nL	4	3	0.49716	0.00374	0.00000	0.000	84.410	9.966	0.000	0.00	1479.60	198.00	0.00	0.00000	0.00000
nL	4	4	0.00000	0.00000	0.00000	0.000	2.775	0.000	0.000	0.00	50.93	0.00	0.00	0.00000	0.00000
nL	4	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nL	4	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
nL	4	7	0.04583	0.00000	0.00000	8.465	8.333	0.000	0.000	110.81	108.33	0.00	0.00	0.02262	0.00987
nL	4	8	0.00000	0.00000	0.00000	0.244	0.000	0.000	0.000	4.59	0.00	0.00	0.00	0.00543	0.00361
nM	1	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	30.539	0.00	0.00	0.00	560.54	0.00000	0.00000
nM	1	2	0.00000	0.00000	0.02947	0.000	0.000	0.000	8.994	0.00	0.00	0.00	160.91	0.00000	0.00000
nM	1	3	0.00000	0.00000	0.45234	0.000	0.000	0.000	1695.216	0.00	0.00	0.00	32206.39	0.00000	0.00000
nM	1	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.009	0.00	0.00	0.00	0.14	0.00000	0.00000
nM	1	5	0.00338	0.00269	0.00248	1.191	11.137	8.869	0.572	15.17	136.19	108.45	7.60	0.00552	0.00222
nM	1	6	0.00000	0.00000	0.00000	0.024	0.000	0.000	0.000	0.38	0.00	0.00	0.00	0.00953	0.00476
nM	1	7	0.00000	0.00000	0.00000	0.041	0.000	0.000	0.000	0.65	0.00	0.00	0.00	0.01652	0.00826
nM	1	8	0.00000	0.00000	0.00000	0.584	0.000	0.000	0.000	9.12	0.00	0.00	0.00	0.23632	0.11816

FUEL	FEEDSTOCK	CC	SC	PH	NMOG_SC	NMOG_CA	NMOG_US	NMOG_RW	CH4_SC	CH4_CA	CH4_US	CH4_RW	NOX_SC	NOX_CA	NOX_US	NOX_RW	CO_SC
M100	Natural Gas	nM	2	1	0.00000	0.00000	0.00000	0.96849	0.00000	0.00000	0.00000	9.79247	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	2	2	0.00000	0.00000	0.00000	0.00371	0.00000	0.00000	0.00000	0.03701	0.00000	0.00000	0.00000	0.06209	0.00000
M100	Natural Gas	nM	2	3	0.00000	0.00000	0.00000	2.23429	0.00000	0.00000	0.00000	6.09740	0.00000	0.00000	0.00000	0.86260	0.00000
M100	Natural Gas	nM	2	4	0.00000	0.00000	0.00000	0.00630	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	2	5	0.00198	0.00675	0.00550	0.19398	0.00000	0.00000	0.00000	0.00000	0.01974	0.11813	0.09625	3.37973	0.00267
M100	Natural Gas	nM	2	6	0.00334	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	2	7	0.04040	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
M100	Natural Gas	nM	2	8	0.33680	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	3	1	0.00000	0.00000	0.00000	0.96849	0.00000	0.00000	0.00000	9.79247	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	3	2	0.00000	0.00000	0.00000	0.00371	0.00000	0.00000	0.00000	0.03701	0.00000	0.00000	0.00000	0.06209	0.00000
M100	Natural Gas	nM	3	3	0.00000	0.00000	0.00000	1.12326	0.00000	0.00000	0.00000	3.08554	0.00000	0.00000	0.00000	0.45400	0.00000
M100	Natural Gas	nM	3	4	0.00000	0.00000	0.00000	0.00630	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	3	5	0.00198	0.00675	0.00550	0.19398	0.00000	0.00000	0.00000	0.00000	0.01974	0.11813	0.09625	3.37973	0.00267
M100	Natural Gas	nM	3	6	0.00334	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	3	7	0.04040	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
M100	Natural Gas	nM	3	8	0.25240	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	4	1	0.00000	0.00000	0.00000	0.96849	0.00000	0.00000	0.00000	9.79247	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	4	2	0.00000	0.00000	0.00000	0.00371	0.00000	0.00000	0.00000	0.03701	0.00000	0.00000	0.00000	0.06209	0.00000
M100	Natural Gas	nM	4	3	0.00000	0.00000	0.00000	2.23429	0.00000	0.00000	0.00000	6.09740	0.00000	0.00000	0.00000	0.86260	0.00000
M100	Natural Gas	nM	4	4	0.00000	0.00000	0.00000	0.00630	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	4	5	0.00198	0.00675	0.00550	0.19398	0.00000	0.00000	0.00000	0.00000	0.01974	0.11813	0.09625	3.37973	0.00267
M100	Natural Gas	nM	4	6	0.00063	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M100	Natural Gas	nM	4	7	0.04040	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
M100	Natural Gas	nM	4	8	0.19348	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	1	1	0.00000	0.00000	0.00000	0.88288	0.00000	0.00000	0.00000	8.92689	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	1	2	0.00000	0.00000	0.00000	0.00338	0.00000	0.00000	0.00000	0.03374	0.00000	0.00000	0.00000	0.05661	0.00000
M85	Natural Gas	nN	1	3	0.16764	0.07049	0.07049	2.15060	0.06204	0.00396	0.00396	5.22518	0.04158	0.02590	0.02590	1.26786	0.03036
M85	Natural Gas	nN	1	4	0.00000	0.00000	0.00000	0.00547	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	1	5	0.00172	0.01172	0.00933	0.00107	0.00000	0.00000	0.00000	0.00000	0.01713	0.20507	0.16329	0.00574	0.00231
M85	Natural Gas	nN	1	6	0.01873	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	1	7	0.06490	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.15064	0.00000	0.00000	0.00000	0.07051
M85	Natural Gas	nN	1	8	0.64470	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	2	1	0.00000	0.00000	0.00000	0.84062	0.00000	0.00000	0.00000	8.49956	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	2	2	0.00000	0.00000	0.00000	0.00322	0.00000	0.00000	0.00000	0.03213	0.00000	0.00000	0.00000	0.05390	0.00000
M85	Natural Gas	nN	2	3	0.08395	0.07049	0.07049	2.15081	0.04092	0.00396	0.00396	5.30439	0.04752	0.02590	0.02590	0.82635	0.01056
M85	Natural Gas	nN	2	4	0.00000	0.00000	0.00000	0.00547	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	2	5	0.00172	0.00586	0.00477	0.16838	0.00000	0.00000	0.00000	0.00000	0.01713	0.10253	0.08355	2.93361	0.00231
M85	Natural Gas	nN	2	6	0.00501	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	2	7	0.06490	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
M85	Natural Gas	nN	2	8	0.64470	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	3	1	0.00000	0.00000	0.00000	0.84062	0.00000	0.00000	0.00000	8.49956	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	3	2	0.00000	0.00000	0.00000	0.00322	0.00000	0.00000	0.00000	0.03213	0.00000	0.00000	0.00000	0.05390	0.00000

CC	SC	PH	CO_CA	CO_US	CO_RW	CO2_SC	CO2_CA	CO2_US	CO2_RW	BTU_SC	BTU_CA	BTU_US	BTU_RW	VMIR_SC	VMOR_SC
nM	2	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	29.079	0.00	0.00	0.00	533.74	0.00000	0.00000
nM	2	2	0.00000	0.00000	0.02806	0.000	0.000	0.000	8.564	0.00	0.00	0.00	153.21	0.00000	0.00000
nM	2	3	0.00000	0.00000	0.35872	0.000	0.000	0.000	1003.357	0.00	0.00	0.00	16207.63	0.00000	0.00000
nM	2	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.009	0.00	0.00	0.00	0.14	0.00000	0.00000
nM	2	5	0.00169	0.00138	0.05067	1.191	5.569	4.537	159.591	15.17	68.09	55.48	1952.06	0.00552	0.00222
nM	2	6	0.00000	0.00000	0.00000	0.005	0.000	0.000	0.000	0.07	0.00	0.00	0.00	0.00187	0.00093
nM	2	7	0.00000	0.00000	0.00000	12.862	0.000	0.000	0.000	167.32	0.00	0.00	0.00	0.04691	0.02051
nM	2	8	0.00000	0.00000	0.00000	0.466	0.000	0.000	0.000	7.27	0.00	0.00	0.00	0.18861	0.09430
nM	3	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	29.079	0.00	0.00	0.00	533.74	0.00000	0.00000
nM	3	2	0.00000	0.00000	0.02806	0.000	0.000	0.000	8.564	0.00	0.00	0.00	153.21	0.00000	0.00000
nM	3	3	0.00000	0.00000	0.22061	0.000	0.000	0.000	501.697	0.00	0.00	0.00	7004.43	0.00000	0.00000
nM	3	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.009	0.00	0.00	0.00	0.14	0.00000	0.00000
nM	3	5	0.00169	0.00138	0.05067	1.191	5.569	4.537	159.591	15.17	68.09	55.48	1952.06	0.00552	0.00222
nM	3	6	0.00000	0.00000	0.00000	0.005	0.000	0.000	0.000	0.07	0.00	0.00	0.00	0.00187	0.00093
nM	3	7	0.00000	0.00000	0.00000	12.862	0.000	0.000	0.000	167.32	0.00	0.00	0.00	0.04691	0.02051
nM	3	8	0.00000	0.00000	0.00000	0.349	0.000	0.000	0.000	5.45	0.00	0.00	0.00	0.14135	0.07067
nM	4	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	29.079	0.00	0.00	0.00	533.74	0.00000	0.00000
nM	4	2	0.00000	0.00000	0.02806	0.000	0.000	0.000	8.564	0.00	0.00	0.00	153.21	0.00000	0.00000
nM	4	3	0.00000	0.00000	0.35872	0.000	0.000	0.000	1003.357	0.00	0.00	0.00	16207.63	0.00000	0.00000
nM	4	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.009	0.00	0.00	0.00	0.14	0.00000	0.00000
nM	4	5	0.00169	0.00138	0.05067	1.191	5.569	4.537	159.591	15.17	68.09	55.48	1952.06	0.00552	0.00222
nM	4	6	0.00000	0.00000	0.00000	0.001	0.000	0.000	0.000	0.01	0.00	0.00	0.00	0.00035	0.00018
nM	4	7	0.00000	0.00000	0.00000	12.862	0.000	0.000	0.000	167.32	0.00	0.00	0.00	0.04691	0.02051
nM	4	8	0.00000	0.00000	0.00000	0.267	0.000	0.000	0.000	4.18	0.00	0.00	0.00	0.10835	0.05418
nN	1	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	26.508	0.00	0.00	0.00	486.56	0.00000	0.00000
nN	1	2	0.00000	0.00000	0.02558	0.000	0.000	0.000	7.807	0.00	0.00	0.00	139.67	0.00000	0.00000
nN	1	3	0.00132	0.00132	0.39662	104.808	4.699	4.699	1485.608	1815.53	75.53	75.53	28182.34	0.18515	0.10506
nN	1	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.008	0.00	0.00	0.00	0.12	0.00000	0.00000
nN	1	5	0.00293	0.00233	0.00215	1.033	9.667	7.698	0.496	13.17	118.21	94.13	6.60	0.00479	0.00193
nN	1	6	0.00000	0.00000	0.00000	0.033	0.000	0.000	0.000	0.51	0.00	0.00	0.00	0.01475	0.00755
nN	1	7	0.00000	0.00000	0.00000	12.906	0.000	0.000	0.000	167.99	0.00	0.00	0.00	0.08802	0.04203
nN	1	8	0.00000	0.00000	0.00000	1.009	0.000	0.000	0.000	15.76	0.00	0.00	0.00	0.66154	0.33761
nN	2	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	25.239	0.00	0.00	0.00	463.27	0.00000	0.00000
nN	2	2	0.00000	0.00000	0.02436	0.000	0.000	0.000	7.434	0.00	0.00	0.00	133.00	0.00000	0.00000
nN	2	3	0.00132	0.00132	0.31528	110.616	4.699	4.699	884.930	1961.78	75.53	75.53	14294.42	0.09287	0.05271
nN	2	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.008	0.00	0.00	0.00	0.12	0.00000	0.00000
nN	2	5	0.00146	0.00119	0.04398	1.033	4.834	3.939	138.524	13.17	59.11	48.16	1694.39	0.00479	0.00193
nN	2	6	0.00000	0.00000	0.00000	0.010	0.000	0.000	0.000	0.15	0.00	0.00	0.00	0.00505	0.00262
nN	2	7	0.00000	0.00000	0.00000	12.906	0.000	0.000	0.000	167.99	0.00	0.00	0.00	0.08802	0.04203
nN	2	8	0.00000	0.00000	0.00000	1.009	0.000	0.000	0.000	15.76	0.00	0.00	0.00	0.66154	0.33761
nN	3	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	25.239	0.00	0.00	0.00	463.27	0.00000	0.00000
nN	3	2	0.00000	0.00000	0.02436	0.000	0.000	0.000	7.434	0.00	0.00	0.00	133.00	0.00000	0.00000

FUEL	FEEDSTOCK	CC	SC	PH	NMOG_SC	NMOG_CA	NMOG_US	NMOG_RW	CH4_SC	CH4_CA	CH4_US	CH4_RW	NOX_SC	NOX_CA	NOX_US	NOX_RW	CO_SC
M85	Natural Gas	nN	3	3	0.08268	0.06942	0.06942	1.18324	0.04030	0.00390	0.00390	2.68992	0.04680	0.02551	0.02551	0.47050	0.01040
M85	Natural Gas	nN	3	4	0.00000	0.00000	0.00000	0.00547	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	3	5	0.00172	0.00586	0.00477	0.16838	0.00000	0.00000	0.00000	0.00000	0.01713	0.10253	0.08355	2.93361	0.00231
M85	Natural Gas	nN	3	6	0.00501	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	3	7	0.06490	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
M85	Natural Gas	nN	3	8	0.52950	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	4	1	0.00000	0.00000	0.00000	0.84062	0.00000	0.00000	0.00000	8.49956	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	4	2	0.00000	0.00000	0.00000	0.00322	0.00000	0.00000	0.00000	0.03213	0.00000	0.00000	0.00000	0.05390	0.00000
M85	Natural Gas	nN	4	3	0.08395	0.07049	0.07049	1.25321	0.04092	0.00396	0.00396	2.85639	0.04752	0.02590	0.02590	0.82635	0.01056
M85	Natural Gas	nN	4	4	0.00000	0.00000	0.00000	0.00547	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	4	5	0.00172	0.00586	0.00477	0.16838	0.00000	0.00000	0.00000	0.00000	0.01713	0.10253	0.08355	2.93361	0.00231
M85	Natural Gas	nN	4	6	0.00095	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
M85	Natural Gas	nN	4	7	0.06490	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06026	0.00000	0.00000	0.00000	0.07051
M85	Natural Gas	nN	4	8	0.41208	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	1	1	0.12353	0.49410	0.55587	0.06177	0.00000	0.00000	0.00000	0.00000	0.01468	0.05870	0.06604	0.00734	0.00000
Diesel	Crude Oil	oD	1	2	0.00029	0.00066	0.00023	0.01135	0.00000	0.00000	0.00000	0.00000	0.00287	0.01148	0.00215	0.19841	0.00039
Diesel	Crude Oil	oD	1	3	0.35614	0.03150	0.10231	0.01114	0.18994	0.10279	0.41312	0.09810	0.25379	0.13632	0.31370	0.00158	0.16465
Diesel	Crude Oil	oD	1	4	0.04000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	1	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	1	6	0.00360	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	1	7	0.03271	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.16596	0.00000	0.00000	0.00000	0.07768
Diesel	Crude Oil	oD	1	8	0.40980	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	2	1	0.06184	0.19793	0.41108	0.29017	0.00000	0.00000	0.00000	0.00000	0.00308	0.00986	0.04990	0.03522	0.00000
Diesel	Crude Oil	oD	2	2	0.00036	0.00059	0.00022	0.03726	0.00000	0.00000	0.00000	0.00000	0.00372	0.01041	0.00238	0.65087	0.00046
Diesel	Crude Oil	oD	2	3	0.17335	0.02725	0.09163	0.01654	0.11258	0.10038	0.40970	0.09810	0.14339	0.11414	0.27568	0.00158	0.04866
Diesel	Crude Oil	oD	2	4	0.04000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	2	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	2	6	0.00360	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	2	7	0.03271	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06638	0.00000	0.00000	0.00000	0.07768
Diesel	Crude Oil	oD	2	8	0.40980	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	3	1	0.06184	0.19793	0.41108	0.29017	0.00000	0.00000	0.00000	0.00000	0.00308	0.00986	0.04990	0.03522	0.00000
Diesel	Crude Oil	oD	3	2	0.00036	0.00059	0.00022	0.03726	0.00000	0.00000	0.00000	0.00000	0.00372	0.01041	0.00238	0.65087	0.00046
Diesel	Crude Oil	oD	3	3	0.17335	0.02725	0.09163	0.01654	0.11258	0.10038	0.40970	0.09810	0.14339	0.11414	0.27568	0.00158	0.04866
Diesel	Crude Oil	oD	3	4	0.04000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	3	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	3	6	0.00360	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	3	7	0.03271	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06638	0.00000	0.00000	0.00000	0.07768
Diesel	Crude Oil	oD	3	8	0.25780	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	4	1	0.06184	0.19793	0.41108	0.29017	0.00000	0.00000	0.00000	0.00000	0.00308	0.00986	0.04990	0.03522	0.00000
Diesel	Crude Oil	oD	4	2	0.00036	0.00059	0.00022	0.03726	0.00000	0.00000	0.00000	0.00000	0.00372	0.01041	0.00238	0.65087	0.00046
Diesel	Crude Oil	oD	4	3	0.17335	0.02725	0.09163	0.01654	0.11258	0.10038	0.40970	0.09810	0.14339	0.11414	0.27568	0.00158	0.04866
Diesel	Crude Oil	oD	4	4	0.04000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CC	SC	PH	CO_CA	CO_US	CO_RW	CO2_SC	CO2_CA	CO2_US	CO2_RW	BTU_SC	BTU_CA	BTU_US	BTU_RW	VMIR_SC	VMOR_SC
nN	3	3	0.00130	0.00130	0.19535	108.940	4.628	4.628	449.275	1932.06	74.39	74.39	6302.61	0.09146	0.05191
nN	3	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.008	0.00	0.00	0.00	0.12	0.00000	0.00000
nN	3	5	0.00146	0.00119	0.04398	1.033	4.834	3.939	138.524	13.17	59.11	48.16	1694.39	0.00479	0.00193
nN	3	6	0.00000	0.00000	0.00000	0.010	0.000	0.000	0.000	0.15	0.00	0.00	0.00	0.00505	0.00262
nN	3	7	0.00000	0.00000	0.00000	12.906	0.000	0.000	0.000	167.99	0.00	0.00	0.00	0.08802	0.04203
nN	3	8	0.00000	0.00000	0.00000	0.829	0.000	0.000	0.000	12.94	0.00	0.00	0.00	0.57099	0.29602
nN	4	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	25.239	0.00	0.00	0.00	463.27	0.00000	0.00000
nN	4	2	0.00000	0.00000	0.02436	0.000	0.000	0.000	7.434	0.00	0.00	0.00	133.00	0.00000	0.00000
nN	4	3	0.00132	0.00132	0.31528	110.616	4.699	4.699	875.677	1961.78	75.53	75.53	14128.61	0.09287	0.05271
nN	4	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.008	0.00	0.00	0.00	0.12	0.00000	0.00000
nN	4	5	0.00146	0.00119	0.04398	1.033	4.834	3.939	138.524	13.17	59.11	48.16	1694.39	0.00479	0.00193
nN	4	6	0.00000	0.00000	0.00000	0.002	0.000	0.000	0.000	0.03	0.00	0.00	0.00	0.00096	0.00049
nN	4	7	0.00000	0.00000	0.00000	12.906	0.000	0.000	0.000	167.99	0.00	0.00	0.00	0.08802	0.04203
nN	4	8	0.00000	0.00000	0.00000	0.644	0.000	0.000	0.000	10.08	0.00	0.00	0.00	0.44774	0.23266
oD	1	1	0.00000	0.00000	0.00000	4.669	18.674	21.008	2.334	73.44	293.77	330.50	36.73	0.15865	0.08899
oD	1	2	0.00016	0.00035	0.00287	0.173	0.541	0.135	9.357	2.21	6.62	1.74	114.43	0.00080	0.00032
oD	1	3	0.02232	0.05465	0.00207	572.975	54.466	125.727	0.833	9993.28	1025.18	2365.68	15.27	0.46774	0.24164
oD	1	4	0.00000	0.00000	0.00000	0.127	0.000	0.000	0.000	1.70	0.00	0.00	0.00	0.03436	0.02204
oD	1	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oD	1	6	0.00000	0.00000	0.00000	0.011	0.000	0.000	0.000	0.15	0.00	0.00	0.00	0.00309	0.00198
oD	1	7	0.00000	0.00000	0.00000	14.157	0.000	0.000	0.000	184.51	0.00	0.00	0.00	0.06440	0.03821
oD	1	8	0.00000	0.00000	0.00000	1.306	0.000	0.000	0.000	17.43	0.00	0.00	0.00	0.59560	0.47242
oD	2	1	0.00000	0.00000	0.00000	1.076	3.442	15.849	11.187	16.92	54.15	249.33	176.00	0.07620	0.04365
oD	2	2	0.00015	0.00026	0.00947	0.220	0.491	0.138	30.703	2.79	6.00	1.75	375.47	0.00099	0.00040
oD	2	3	0.01933	0.04979	0.00207	578.568	47.577	115.230	0.848	10146.85	944.17	2284.54	15.52	0.21603	0.11574
oD	2	4	0.00000	0.00000	0.00000	0.127	0.000	0.000	0.000	1.70	0.00	0.00	0.00	0.03436	0.02204
oD	2	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oD	2	6	0.00000	0.00000	0.00000	0.011	0.000	0.000	0.000	0.15	0.00	0.00	0.00	0.00309	0.00198
oD	2	7	0.00000	0.00000	0.00000	14.157	0.000	0.000	0.000	184.51	0.00	0.00	0.00	0.06440	0.03821
oD	2	8	0.00000	0.00000	0.00000	1.306	0.000	0.000	0.000	17.43	0.00	0.00	0.00	0.59560	0.47242
oD	3	1	0.00000	0.00000	0.00000	1.076	3.442	15.849	11.187	16.92	54.15	249.33	176.00	0.07620	0.04365
oD	3	2	0.00015	0.00026	0.00947	0.220	0.491	0.138	30.703	2.79	6.00	1.75	375.47	0.00099	0.00040
oD	3	3	0.01933	0.04979	0.00207	578.568	47.577	115.230	0.848	10146.85	944.17	2284.54	15.52	0.21603	0.11574
oD	3	4	0.00000	0.00000	0.00000	0.127	0.000	0.000	0.000	1.70	0.00	0.00	0.00	0.03436	0.02204
oD	3	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oD	3	6	0.00000	0.00000	0.00000	0.011	0.000	0.000	0.000	0.15	0.00	0.00	0.00	0.00309	0.00198
oD	3	7	0.00000	0.00000	0.00000	14.157	0.000	0.000	0.000	184.51	0.00	0.00	0.00	0.06440	0.03821
oD	3	8	0.00000	0.00000	0.00000	0.822	0.000	0.000	0.000	10.96	0.00	0.00	0.00	0.36760	0.29002
oD	4	1	0.00000	0.00000	0.00000	1.076	3.442	15.849	11.187	16.92	54.15	249.33	176.00	0.07620	0.04365
oD	4	2	0.00015	0.00026	0.00947	0.220	0.491	0.138	30.703	2.79	6.00	1.75	375.47	0.00099	0.00040
oD	4	3	0.01933	0.04979	0.00207	578.568	47.577	115.230	0.848	10146.85	944.17	2284.54	15.52	0.21603	0.11574
oD	4	4	0.00000	0.00000	0.00000	0.127	0.000	0.000	0.000	1.70	0.00	0.00	0.00	0.03436	0.02204

FUEL	FEEDSTOCK	CC	SC	PH	NMOG_SC	NMOG_CA	NMOG_US	NMOG_RW	CH4_SC	CH4_CA	CH4_US	CH4_RW	NOX_SC	NOX_CA	NOX_US	NOX_RW	CO_SC
Diesel	Crude Oil	oD	4	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	4	6	0.00360	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Diesel	Crude Oil	oD	4	7	0.03271	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06638	0.00000	0.00000	0.00000	0.07768
Diesel	Crude Oil	oD	4	8	0.35824	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	1	1	0.27670	1.10678	1.24513	0.13835	0.00000	0.00000	0.00000	0.00000	0.03287	0.13149	0.14792	0.01644	0.00000
Gasoline	Crude Oil	oG	1	2	0.00064	0.00147	0.00052	0.02542	0.00000	0.00000	0.00000	0.00000	0.00645	0.02571	0.00480	0.44443	0.00087
Gasoline	Crude Oil	oG	1	3	0.84387	0.04710	0.15373	0.01290	0.45537	0.11681	0.44509	0.09810	0.41296	0.22632	0.51890	0.00158	0.23991
Gasoline	Crude Oil	oG	1	4	0.19000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	1	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	1	6	0.03830	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	1	7	0.08420	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.13824	0.00000	0.00000	0.00000	0.06471
Gasoline	Crude Oil	oG	1	8	0.93840	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	2	1	0.13855	0.44336	0.92081	0.64998	0.00000	0.00000	0.00000	0.00000	0.00690	0.02209	0.11176	0.07889	0.00000
Gasoline	Crude Oil	oG	2	2	0.00080	0.00133	0.00049	0.08345	0.00000	0.00000	0.00000	0.00000	0.00833	0.02331	0.00534	1.45795	0.00102
Gasoline	Crude Oil	oG	2	3	0.42852	0.04001	0.13412	0.02499	0.25733	0.11280	0.43940	0.09810	0.25670	0.18935	0.45553	0.00158	0.07361
Gasoline	Crude Oil	oG	2	4	0.10070	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	2	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	2	6	0.02030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	2	7	0.08420	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.05529	0.00000	0.00000	0.00000	0.06471
Gasoline	Crude Oil	oG	2	8	0.93840	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	3	1	0.13855	0.44336	0.92081	0.64998	0.00000	0.00000	0.00000	0.00000	0.00690	0.02209	0.11176	0.07889	0.00000
Gasoline	Crude Oil	oG	3	2	0.00080	0.00133	0.00049	0.08345	0.00000	0.00000	0.00000	0.00000	0.00833	0.02331	0.00534	1.45795	0.00102
Gasoline	Crude Oil	oG	3	3	0.42852	0.04001	0.13412	0.02499	0.25733	0.11280	0.43940	0.09810	0.25670	0.18935	0.45553	0.00158	0.07361
Gasoline	Crude Oil	oG	3	4	0.10070	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	3	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	3	6	0.02030	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	3	7	0.08420	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.05529	0.00000	0.00000	0.00000	0.06471
Gasoline	Crude Oil	oG	3	8	0.81140	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	4	1	0.13855	0.44336	0.92081	0.64998	0.00000	0.00000	0.00000	0.00000	0.00690	0.02209	0.11176	0.07889	0.00000
Gasoline	Crude Oil	oG	4	2	0.00080	0.00133	0.00049	0.08345	0.00000	0.00000	0.00000	0.00000	0.00833	0.02331	0.00534	1.45795	0.00102
Gasoline	Crude Oil	oG	4	3	0.42852	0.04001	0.13412	0.02499	0.25733	0.11280	0.43940	0.09810	0.25670	0.18935	0.45553	0.00158	0.07361
Gasoline	Crude Oil	oG	4	4	0.01900	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	4	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	4	6	0.00383	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Gasoline	Crude Oil	oG	4	7	0.08420	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.05529	0.00000	0.00000	0.00000	0.06471
Gasoline	Crude Oil	oG	4	8	0.49672	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	1	1	0.00988	0.03953	0.04447	0.00494	0.00000	0.00000	0.00000	0.00000	0.00117	0.00470	0.00528	0.00059	0.00000
LPG	Crude Oil	oP	1	2	0.00002	0.00005	0.00002	0.00091	0.00000	0.00000	0.00000	0.00000	0.00023	0.00092	0.00017	0.01587	0.00003
LPG	Crude Oil	oP	1	3	0.04981	0.00423	0.01774	0.00400	0.02473	0.03359	0.14809	0.03924	0.05843	0.00623	0.01536	0.00063	0.05371
LPG	Crude Oil	oP	1	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	1	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	1	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CC	SC	PH	CO_CA	CO_US	CO_RW	CO2_SC	CO2_CA	CO2_US	CO2_RW	BTU_SC	BTU_CA	BTU_US	BTU_RW	VMIR_SC	VMOR_SC
oD	4	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oD	4	6	0.00000	0.00000	0.00000	0.011	0.000	0.000	0.000	0.15	0.00	0.00	0.00	0.00309	0.00198
oD	4	7	0.00000	0.00000	0.00000	14.157	0.000	0.000	0.000	184.51	0.00	0.00	0.00	0.06440	0.03821
oD	4	8	0.00000	0.00000	0.00000	1.142	0.000	0.000	0.000	15.23	0.00	0.00	0.00	0.52208	0.41442
oG	1	1	0.00000	0.00000	0.00000	10.458	41.829	47.058	5.229	164.51	658.04	740.30	82.26	0.35537	0.19933
oG	1	2	0.00037	0.00077	0.00643	0.389	1.212	0.303	20.961	4.95	14.82	3.89	256.32	0.00180	0.00073
oG	1	3	0.03604	0.08594	0.00207	833.916	90.316	207.511	0.838	14554.13	1700.18	3905.40	15.35	1.01537	0.55345
oG	1	4	0.00000	0.00000	0.00000	0.575	0.000	0.000	0.000	8.50	0.00	0.00	0.00	0.34390	0.17670
oG	1	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oG	1	6	0.00000	0.00000	0.00000	0.116	0.000	0.000	0.000	1.71	0.00	0.00	0.00	0.06932	0.03562
oG	1	7	0.00000	0.00000	0.00000	11.990	0.000	0.000	0.000	156.25	0.00	0.00	0.00	0.18515	0.08447
oG	1	8	0.00000	0.00000	0.00000	2.840	0.000	0.000	0.000	41.99	0.00	0.00	0.00	2.11284	0.94892
oG	2	1	0.00000	0.00000	0.00000	2.411	7.713	35.502	25.060	37.91	121.31	558.51	394.24	0.17068	0.09779
oG	2	2	0.00033	0.00061	0.02122	0.492	1.099	0.309	68.775	6.24	13.44	3.91	841.05	0.00223	0.00090
oG	2	3	0.03106	0.07784	0.00207	842.673	78.833	190.009	0.873	14801.20	1565.18	3770.08	15.89	0.50203	0.27920
oG	2	4	0.00000	0.00000	0.00000	0.305	0.000	0.000	0.000	4.50	0.00	0.00	0.00	0.18227	0.09365
oG	2	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oG	2	6	0.00000	0.00000	0.00000	0.061	0.000	0.000	0.000	0.91	0.00	0.00	0.00	0.03674	0.01888
oG	2	7	0.00000	0.00000	0.00000	11.990	0.000	0.000	0.000	156.25	0.00	0.00	0.00	0.18515	0.08447
oG	2	8	0.00000	0.00000	0.00000	2.840	0.000	0.000	0.000	41.99	0.00	0.00	0.00	2.11284	0.94892
oG	3	1	0.00000	0.00000	0.00000	2.411	7.713	35.502	25.060	37.91	121.31	558.51	394.24	0.17068	0.09779
oG	3	2	0.00033	0.00061	0.02122	0.492	1.099	0.309	68.775	6.24	13.44	3.91	841.05	0.00223	0.00090
oG	3	3	0.03106	0.07784	0.00207	842.673	78.833	190.009	0.873	14801.20	1565.18	3770.08	15.89	0.50203	0.27920
oG	3	4	0.00000	0.00000	0.00000	0.305	0.000	0.000	0.000	4.50	0.00	0.00	0.00	0.18227	0.09365
oG	3	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oG	3	6	0.00000	0.00000	0.00000	0.061	0.000	0.000	0.000	0.91	0.00	0.00	0.00	0.03674	0.01888
oG	3	7	0.00000	0.00000	0.00000	11.990	0.000	0.000	0.000	156.25	0.00	0.00	0.00	0.18515	0.08447
oG	3	8	0.00000	0.00000	0.00000	2.456	0.000	0.000	0.000	36.31	0.00	0.00	0.00	1.71724	0.80033
oG	4	1	0.00000	0.00000	0.00000	2.411	7.713	35.502	25.060	37.91	121.31	558.51	394.24	0.17068	0.09779
oG	4	2	0.00033	0.00061	0.02122	0.492	1.099	0.309	68.775	6.24	13.44	3.91	841.05	0.00223	0.00090
oG	4	3	0.03106	0.07784	0.00207	842.673	78.833	190.009	0.873	14801.20	1565.18	3770.08	15.89	0.50203	0.27920
oG	4	4	0.00000	0.00000	0.00000	0.058	0.000	0.000	0.000	0.85	0.00	0.00	0.00	0.03439	0.01767
oG	4	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oG	4	6	0.00000	0.00000	0.00000	0.012	0.000	0.000	0.000	0.17	0.00	0.00	0.00	0.00693	0.00356
oG	4	7	0.00000	0.00000	0.00000	11.990	0.000	0.000	0.000	156.25	0.00	0.00	0.00	0.18515	0.08447
oG	4	8	0.00000	0.00000	0.00000	1.503	0.000	0.000	0.000	22.22	0.00	0.00	0.00	0.89906	0.46195
oP	1	1	0.00000	0.00000	0.00000	0.374	1.494	1.680	0.187	5.88	23.50	26.44	2.94	0.01269	0.00712
oP	1	2	0.00001	0.00003	0.00023	0.014	0.043	0.011	0.749	0.18	0.53	0.14	9.16	0.00006	0.00003
oP	1	3	0.00156	0.00506	0.00083	190.545	2.546	6.414	0.332	3307.10	47.82	120.17	6.09	0.08281	0.03733
oP	1	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	1	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	1	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000

FUEL	FEEDSTOCK	CC	SC	PH	NMOG_SC	NMOG_CA	NMOG_US	NMOG_RW	CH4_SC	CH4_CA	CH4_US	CH4_RW	NOX_SC	NOX_CA	NOX_US	NOX_RW	CO_SC
LPG	Crude Oil	oP	1	7	2.07930	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.11750	0.00000	0.00000	0.00000	0.05500
LPG	Crude Oil	oP	1	8	15.08000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	2	1	0.00495	0.01584	0.03288	0.02322	0.00000	0.00000	0.00000	0.00000	0.00025	0.00079	0.00399	0.00282	0.00000
LPG	Crude Oil	oP	2	2	0.00003	0.00005	0.00002	0.00298	0.00000	0.00000	0.00000	0.00000	0.00030	0.00083	0.00019	0.05207	0.00003
LPG	Crude Oil	oP	2	3	0.01796	0.00409	0.01728	0.00444	0.01467	0.03353	0.14804	0.03924	0.01623	0.00554	0.01435	0.00063	0.01204
LPG	Crude Oil	oP	2	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	2	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	2	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	2	7	0.07930	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.04700	0.00000	0.00000	0.00000	0.05500
LPG	Crude Oil	oP	2	8	0.08000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	3	1	0.00495	0.01584	0.03288	0.02322	0.00000	0.00000	0.00000	0.00000	0.00025	0.00079	0.00399	0.00282	0.00000
LPG	Crude Oil	oP	3	2	0.00003	0.00005	0.00002	0.00298	0.00000	0.00000	0.00000	0.00000	0.00030	0.00083	0.00019	0.05207	0.00003
LPG	Crude Oil	oP	3	3	0.01796	0.00409	0.01728	0.00444	0.01467	0.03353	0.14804	0.03924	0.01623	0.00554	0.01435	0.00063	0.01204
LPG	Crude Oil	oP	3	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	3	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	3	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	3	7	0.07930	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.04700	0.00000	0.00000	0.00000	0.05500
LPG	Crude Oil	oP	3	8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	4	1	0.00495	0.01584	0.03288	0.02322	0.00000	0.00000	0.00000	0.00000	0.00025	0.00079	0.00399	0.00282	0.00000
LPG	Crude Oil	oP	4	2	0.00003	0.00005	0.00002	0.00298	0.00000	0.00000	0.00000	0.00000	0.00030	0.00083	0.00019	0.05207	0.00003
LPG	Crude Oil	oP	4	3	0.01796	0.00409	0.01728	0.00444	0.01467	0.03353	0.14804	0.03924	0.01623	0.00554	0.01435	0.00063	0.01204
LPG	Crude Oil	oP	4	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	4	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	4	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
LPG	Crude Oil	oP	4	7	0.07930	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.04700	0.00000	0.00000	0.00000	0.05500
LPG	Crude Oil	oP	4	8	0.08000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	1	1	0.28658	1.14631	1.28960	0.14329	0.00000	0.00000	0.00000	0.00000	0.03405	0.13618	0.15321	0.01702	0.00000
RFG	Crude Oil	oR	1	2	0.00067	0.00152	0.00055	0.02633	0.00000	0.00000	0.00000	0.00000	0.00668	0.02663	0.00497	0.46030	0.00090
RFG	Crude Oil	oR	1	3	0.84397	0.05120	0.16246	0.09348	0.45867	0.13356	0.51838	0.13026	0.40253	0.23143	0.52331	0.15542	0.24010
RFG	Crude Oil	oR	1	4	0.17000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	1	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	1	6	0.03010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	1	7	0.07700	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.13824	0.00000	0.00000	0.00000	0.06471
RFG	Crude Oil	oR	1	8	0.85870	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	2	1	0.14351	0.45920	0.95370	0.67320	0.00000	0.00000	0.00000	0.00000	0.00715	0.02288	0.11576	0.08171	0.00000
RFG	Crude Oil	oR	2	2	0.00082	0.00138	0.00051	0.08643	0.00000	0.00000	0.00000	0.00000	0.00863	0.02414	0.00552	1.51002	0.00107
RFG	Crude Oil	oR	2	3	0.42805	0.04411	0.14290	0.10550	0.26063	0.12955	0.51269	0.13026	0.24627	0.19446	0.45994	0.15542	0.07381
RFG	Crude Oil	oR	2	4	0.09010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	2	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	2	6	0.01595	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	2	7	0.07700	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.05529	0.00000	0.00000	0.00000	0.06471
RFG	Crude Oil	oR	2	8	0.85870	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CC	SC	PH	CO_CA	CO_US	CO_RW	CO2_SC	CO2_CA	CO2_US	CO2_RW	BTU_SC	BTU_CA	BTU_US	BTU_RW	VMIR_SC	VMOR_SC
oP	1	7	0.00000	0.00000	0.00000	16.207	0.000	0.000	0.000	229.07	0.00	0.00	0.00	1.02183	0.65357
oP	1	8	0.00000	0.00000	0.00000	45.199	0.000	0.000	0.000	721.43	0.00	0.00	0.00	7.26856	4.68988
oP	2	1	0.00000	0.00000	0.00000	0.086	0.275	1.268	0.895	1.36	4.34	19.94	14.08	0.00609	0.00349
oP	2	2	0.00001	0.00002	0.00075	0.018	0.039	0.011	2.456	0.22	0.48	0.14	30.03	0.00008	0.00003
oP	2	3	0.00147	0.00495	0.00083	190.860	2.360	6.219	0.333	3315.25	46.47	121.68	6.10	0.02575	0.01266
oP	2	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	2	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	2	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	2	7	0.00000	0.00000	0.00000	10.212	0.000	0.000	0.000	133.39	0.00	0.00	0.00	0.05783	0.03157
oP	2	8	0.00000	0.00000	0.00000	0.240	0.000	0.000	0.000	3.83	0.00	0.00	0.00	0.03856	0.02488
oP	3	1	0.00000	0.00000	0.00000	0.086	0.275	1.268	0.895	1.36	4.34	19.94	14.08	0.00609	0.00349
oP	3	2	0.00001	0.00002	0.00075	0.018	0.039	0.011	2.456	0.22	0.48	0.14	30.03	0.00008	0.00003
oP	3	3	0.00147	0.00495	0.00083	190.860	2.360	6.219	0.333	3315.25	46.47	121.68	6.10	0.02575	0.01266
oP	3	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	3	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	3	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	3	7	0.00000	0.00000	0.00000	10.212	0.000	0.000	0.000	133.39	0.00	0.00	0.00	0.05783	0.03157
oP	3	8	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	4	1	0.00000	0.00000	0.00000	0.086	0.275	1.268	0.895	1.36	4.34	19.94	14.08	0.00609	0.00349
oP	4	2	0.00001	0.00002	0.00075	0.018	0.039	0.011	2.456	0.22	0.48	0.14	30.03	0.00008	0.00003
oP	4	3	0.00147	0.00495	0.00083	190.860	2.360	6.219	0.333	3315.25	46.47	121.68	6.10	0.02575	0.01266
oP	4	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	4	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	4	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oP	4	7	0.00000	0.00000	0.00000	10.212	0.000	0.000	0.000	133.39	0.00	0.00	0.00	0.05783	0.03157
oP	4	8	0.00000	0.00000	0.00000	0.240	0.000	0.000	0.000	3.83	0.00	0.00	0.00	0.03856	0.02488
oR	1	1	0.00000	0.00000	0.00000	10.831	43.323	48.739	5.415	170.39	681.55	766.74	85.19	0.36807	0.20645
oR	1	2	0.00038	0.00080	0.00665	0.402	1.255	0.313	21.709	5.13	15.35	4.03	265.47	0.00187	0.00076
oR	1	3	0.03678	0.08774	0.01502	833.981	91.859	209.064	45.509	14555.31	1728.51	3933.92	835.31	1.01201	0.55265
oR	1	4	0.00000	0.00000	0.00000	0.515	0.000	0.000	0.000	7.61	0.00	0.00	0.00	0.27710	0.14620
oR	1	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oR	1	6	0.00000	0.00000	0.00000	0.091	0.000	0.000	0.000	1.35	0.00	0.00	0.00	0.04906	0.02589
oR	1	7	0.00000	0.00000	0.00000	11.969	0.000	0.000	0.000	155.93	0.00	0.00	0.00	0.15101	0.07060
oR	1	8	0.00000	0.00000	0.00000	2.599	0.000	0.000	0.000	38.43	0.00	0.00	0.00	1.65083	0.76991
oR	2	1	0.00000	0.00000	0.00000	2.496	7.988	36.770	25.955	39.27	125.64	578.45	408.32	0.17677	0.10128
oR	2	2	0.00035	0.00063	0.02197	0.509	1.138	0.320	71.231	6.46	13.92	4.05	871.08	0.00231	0.00093
oR	2	3	0.03180	0.07964	0.01502	842.739	80.376	191.562	45.543	14802.39	1593.51	3798.60	835.85	0.49817	0.27808
oR	2	4	0.00000	0.00000	0.00000	0.273	0.000	0.000	0.000	4.03	0.00	0.00	0.00	0.14686	0.07749
oR	2	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oR	2	6	0.00000	0.00000	0.00000	0.048	0.000	0.000	0.000	0.72	0.00	0.00	0.00	0.02600	0.01372
oR	2	7	0.00000	0.00000	0.00000	11.969	0.000	0.000	0.000	155.93	0.00	0.00	0.00	0.15101	0.07060
oR	2	8	0.00000	0.00000	0.00000	2.599	0.000	0.000	0.000	38.43	0.00	0.00	0.00	1.65083	0.76991

FUEL	FEEDSTOCK	CC	SC	PH	NMOG_SC	NMOG_CA	NMOG_US	NMOG_RW	CH4_SC	CH4_CA	CH4_US	CH4_RW	NOX_SC	NOX_CA	NOX_US	NOX_RW	CO_SC
RFG	Crude Oil	oR	3	1	0.14351	0.45920	0.95370	0.67320	0.00000	0.00000	0.00000	0.00000	0.00715	0.02288	0.11576	0.08171	0.00000
RFG	Crude Oil	oR	3	2	0.00082	0.00138	0.00051	0.08643	0.00000	0.00000	0.00000	0.00000	0.00863	0.02414	0.00552	1.51002	0.00107
RFG	Crude Oil	oR	3	3	0.42805	0.04411	0.14290	0.10550	0.26063	0.12955	0.51269	0.13026	0.24627	0.19446	0.45994	0.15542	0.07381
RFG	Crude Oil	oR	3	4	0.09010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	3	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	3	6	0.01595	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	3	7	0.07700	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.05529	0.00000	0.00000	0.00000	0.06471
RFG	Crude Oil	oR	3	8	0.73170	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	4	1	0.14351	0.45920	0.95370	0.67320	0.00000	0.00000	0.00000	0.00000	0.00715	0.02288	0.11576	0.08171	0.00000
RFG	Crude Oil	oR	4	2	0.00082	0.00138	0.00051	0.08643	0.00000	0.00000	0.00000	0.00000	0.00863	0.02414	0.00552	1.51002	0.00107
RFG	Crude Oil	oR	4	3	0.40719	0.04411	0.14290	0.10550	0.26063	0.12955	0.51269	0.13026	0.24627	0.19446	0.45994	0.15542	0.07381
RFG	Crude Oil	oR	4	4	0.01700	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	4	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	4	6	0.00301	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RFG	Crude Oil	oR	4	7	0.07700	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.05529	0.00000	0.00000	0.00000	0.06471
RFG	Crude Oil	oR	4	8	0.57266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	1	1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	1	2	0.01717	0.08605	0.36568	0.09798	0.05346	0.83147	3.68170	0.98885	0.00023	0.01716	0.07329	0.01597	0.00133
Elec	SCE Mix	xJ	1	3	0.01566	0.01375	0.00741	0.00000	0.00900	0.01250	0.00570	0.00000	0.08406	0.05825	0.71820	0.00000	0.04140
Elec	SCE Mix	xJ	1	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	1	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	1	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	1	7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	1	8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	2	1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	2	2	0.01411	0.04374	0.19636	0.05249	0.14553	0.44145	1.97280	0.52974	0.00062	0.00713	0.04570	0.00855	0.00397
Elec	SCE Mix	xJ	2	3	0.00784	0.01056	0.00319	0.00000	0.00490	0.01100	0.00290	0.00000	0.04851	0.05390	0.30450	0.00000	0.04263
Elec	SCE Mix	xJ	2	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	2	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	2	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	2	7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	2	8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	3	1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	3	2	0.01670	0.03062	0.13775	0.03674	0.17226	0.30902	1.38126	0.37082	0.00073	0.00499	0.03615	0.00599	0.00470
Elec	SCE Mix	xJ	3	3	0.01218	0.01116	0.00312	0.00000	0.01160	0.01080	0.00240	0.00000	0.04118	0.06372	0.29280	0.00000	0.01102
Elec	SCE Mix	xJ	3	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	3	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	3	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	3	7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	3	8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	4	1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	4	2	0.01670	0.03062	0.13775	0.03674	0.17226	0.30902	1.38126	0.37082	0.00073	0.00499	0.03615	0.00599	0.00470

CC	SC	PH	CO_CA	CO_US	CO_RW	CO2_SC	CO2_CA	CO2_US	CO2_RW	BTU_SC	BTU_CA	BTU_US	BTU_RW	VMIR_SC	VMOR_SC
oR	3	1	0.00000	0.00000	0.00000	2.496	7.988	36.770	25.955	39.27	125.64	578.45	408.32	0.17677	0.10128
oR	3	2	0.00035	0.00063	0.02197	0.509	1.138	0.320	71.231	6.46	13.92	4.05	871.08	0.00231	0.00093
oR	3	3	0.03180	0.07964	0.01502	842.739	80.376	191.562	45.543	14802.39	1593.51	3798.60	835.85	0.49817	0.27808
oR	3	4	0.00000	0.00000	0.00000	0.273	0.000	0.000	0.000	4.03	0.00	0.00	0.00	0.14686	0.07749
oR	3	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oR	3	6	0.00000	0.00000	0.00000	0.048	0.000	0.000	0.000	0.72	0.00	0.00	0.00	0.02600	0.01372
oR	3	7	0.00000	0.00000	0.00000	11.969	0.000	0.000	0.000	155.93	0.00	0.00	0.00	0.15101	0.07060
oR	3	8	0.00000	0.00000	0.00000	2.215	0.000	0.000	0.000	32.75	0.00	0.00	0.00	1.34336	0.64812
oR	4	1	0.00000	0.00000	0.00000	2.496	7.988	36.770	25.955	39.27	125.64	578.45	408.32	0.17677	0.10128
oR	4	2	0.00035	0.00063	0.02197	0.509	1.138	0.320	71.231	6.46	13.92	4.05	871.08	0.00231	0.00093
oR	4	3	0.03180	0.07964	0.01502	842.679	80.376	191.562	45.543	14801.46	1593.51	3798.60	835.85	0.47868	0.26604
oR	4	4	0.00000	0.00000	0.00000	0.052	0.000	0.000	0.000	0.76	0.00	0.00	0.00	0.02771	0.01462
oR	4	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
oR	4	6	0.00000	0.00000	0.00000	0.009	0.000	0.000	0.000	0.14	0.00	0.00	0.00	0.00491	0.00259
oR	4	7	0.00000	0.00000	0.00000	11.969	0.000	0.000	0.000	155.93	0.00	0.00	0.00	0.15101	0.07060
oR	4	8	0.00000	0.00000	0.00000	1.733	0.000	0.000	0.000	25.63	0.00	0.00	0.00	1.04393	0.50632
xJ	1	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	1	2	0.02022	0.08262	0.02087	0.530	8.190	31.091	8.353	9.72	150.31	570.68	153.32	0.01607	0.00998
xJ	1	3	0.03000	0.04161	0.00000	108.360	62.000	347.130	0.000	1620.00	2250.00	5130.00	0.00	0.03571	0.01437
xJ	1	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	1	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	1	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	1	7	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	1	8	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	2	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	2	2	0.00932	0.04656	0.01118	1.442	3.729	16.656	4.475	26.46	68.44	305.72	82.13	0.01471	0.00922
xJ	2	3	0.04554	0.00609	0.00000	240.100	105.820	140.360	0.000	4410.00	1980.00	2610.00	0.00	0.01789	0.00720
xJ	2	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	2	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	2	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	2	7	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	2	8	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	3	1	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	3	2	0.00652	0.03407	0.00782	1.706	2.610	11.659	3.132	31.32	47.91	214.00	57.49	0.01742	0.01091
xJ	3	3	0.04212	0.00720	0.00000	277.820	88.200	138.240	0.000	5220.00	1620.00	2160.00	0.00	0.02784	0.01122
xJ	3	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	3	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	3	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	3	7	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	3	8	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	4	1	0.00000	0.00000	0.00000	0,000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	4	2	0.00652	0.03407	0.00782	1.706	2.610	11.659	3.132	31.32	47.91	214.00	57.49	0.01742	0.01091

FUEL	FEEDSTOCK	CC	SC	PH	NMOG_SC	NMOG_CA	NMOG_US	NMOG_RW	CH4_SC	CH4_CA	CH4_US	CH4_RW	NOX_SC	NOX_CA	NOX_US	NOX_RW	CO_SC
Elec	SCE Mix	xJ	4	3	0.01218	0.01116	0.00312	0.00000	0.01160	0.01080	0.00240	0.00000	0.04118	0.06372	0.29280	0.00000	0.01102
Elec	SCE Mix	xJ	4	4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	4	5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	4	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	4	7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Elec	SCE Mix	xJ	4	8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CC	SC	PH	CO_CA	CO_US	CO_RW	CO2_SC	CO2_CA	CO2_US	CO2_RW	BTU_SC	BTU_CA	BTU_US	BTU_RW	VMIR_SC	VMOR_SC
xJ	4	3	0.04212	0.00720	0.00000	277.820	88.200	138.240	0.000	5220.00	1620.00	2160.00	0.00	0.02784	0.01122
xJ	4	4	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	4	5	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	4	6	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	4	7	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000
xJ	4	8	0.00000	0.00000	0.00000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00000	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
NMOG	Gasoline	oG	1	South Coast Area	0.01206	0.03669	0.01359	0.04080
NMOG	RFG	oR	1	South Coast Area	0.01276	0.03748	0.01231	0.03813
NMOG	Diesel	oD	1	South Coast Area	0.00396	0.01139	0.00245	0.01310
NMOG	LPG	oP	1	South Coast Area	0.00060	0.00301	0.12571	0.91173
NMOG	M85	nN	1	South Coast Area	0.00000	0.01244	0.00633	0.04783
NMOG	M85	bN	1	South Coast Area	0.00000	0.01244	0.00989	0.04783
NMOG	M100	nM	1	South Coast Area	0.00000	0.00000	0.00407	0.03537
NMOG	E85	bE	1	South Coast Area	0.00000	0.12164	0.00526	0.04451
NMOG	CNG	nC	1	South Coast Area	0.00028	0.00074	0.02999	0.00098
NMOG	LNG	nL	1	South Coast Area	0.00000	0.00000	0.04439	0.00070
NMOG	H2	nH	1	South Coast Area	0.00000	0.00000	0.00496	0.00000
NMOG	Elect	xJ	1	South Coast Area	0.00600	0.00548	0.00000	0.00000
NMOG	Gasoline	oG	2	South Coast Area	0.00507	0.01558	0.00746	0.03412
NMOG	RFG	oR	2	South Coast Area	0.00536	0.01589	0.00680	0.03189
NMOG	Diesel	oD	2	South Coast Area	0.00166	0.00464	0.00204	0.01096
NMOG	LPG	oP	2	South Coast Area	0.00024	0.00088	0.00389	0.00393
NMOG	M85	nN	2	South Coast Area	0.00000	0.00531	0.00454	0.04080
NMOG	M85	bN	2	South Coast Area	0.00000	0.00531	0.00517	0.04080
NMOG	M100	nM	2	South Coast Area	0.00000	0.00000	0.00320	0.02362
NMOG	E85	bE	2	South Coast Area	0.00000	0.00538	0.00487	0.03793
NMOG	CNG	nC	2	South Coast Area	0.00000	0.00000	0.02379	0.00064
NMOG	LNG	nL	2	South Coast Area	0.00000	0.00000	0.00070	0.00057
NMOG	LH2	nH	2	South Coast Area	0.00000	0.00000	0.00029	0.00000
NMOG	Elect	xJ	2	South Coast Area	0.00353	0.00196	0.00000	0.00000
NMOG	Gasoline	oG	3	South Coast Area	0.00507	0.01558	0.00746	0.02951
NMOG	RFG	oR	3	South Coast Area	0.00536	0.01589	0.00680	0.02717
NMOG	Diesel	oD	3	South Coast Area	0.00166	0.00464	0.00204	0.00689
NMOG	LPG	oP	3	South Coast Area	0.00024	0.00088	0.00389	0.00000
NMOG	M85	nN	3	South Coast Area	0.00000	0.00523	0.00454	0.03351
NMOG	M85	bN	3	South Coast Area	0.00000	0.00531	0.00500	0.03351
NMOG	M100	nM	3	South Coast Area	0.00000	0.00000	0.00320	0.01770
NMOG	E84	bE	3	South Coast Area	0.00000	0.00538	0.00421	0.03220
NMOG	CNG	nC	3	South Coast Area	0.00000	0.00000	0.02365	0.00048
NMOG	LNG	nL	3	South Coast Area	0.00000	0.00000	0.00070	0.00057
NMOG	LH2	nH	3	South Coast Area	0.00000	0.00000	0.00029	0.00000
NMOG	Elect	xJ	3	South Coast Area	0.00418	0.00305	0.00000	0.00000
NMOG	Gasoline	oG	4	South Coast Area	0.00436	0.01339	0.00334	0.01552
NMOG	RFG	oR	4	South Coast Area	0.00461	0.01300	0.00310	0.01828
NMOG	Diesel	oD	4	South Coast Area	0.00143	0.00398	0.00175	0.00823
NMOG	LPG	oP	4	South Coast Area	0.00020	0.00074	0.00328	0.00331
NMOG	M85	nN	4	South Coast Area	0.00000	0.00448	0.00360	0.02198
NMOG	M85	bN	4	South Coast Area	0.00000	0.00448	0.00360	0.02198
NMOG	M100	nM	4	South Coast Area	0.00000	0.00000	0.00247	0.01113
NMOG	E85	bE	4	South Coast Area	0.00000	0.00454	0.00292	0.02123
NMOG	CNG	nC	4	South Coast Area	0.00000	0.00000	0.01948	0.00027
NMOG	LNG	nL	4	South Coast Area	0.00000	0.00000	0.00059	0.00048
NMOG	LH2	nH	4	South Coast Area	0.00000	0.00000	0.00025	0.00000
NMOG	Elect	xJ	4	South Coast Area	0.00334	0.00244	0.00000	0.00000
NMOG	Gasoline	oG	1	California other than South Coast	0.04818	0.00205	0.00000	0.00000
NMOG	RFG	oR	1	California other than South Coast	0.05097	0.00227	0.00000	0.00000
NMOG	Diesel	oD	1	California other than South Coast	0.01582	0.00101	0.00000	0.00000
NMOG	LPG	oP	1	California other than South Coast	0.00239	0.00026	0.00000	0.00000
NMOG	M85	nN	1	California other than South Coast	0.00000	0.00523	0.00087	0.00000
NMOG	M85	bN	1	California other than South Coast	0.06603	0.20305	0.01593	0.00000
NMOG	M100	nM	1	California other than South Coast	0.00000	0.00000	0.00113	0.00000
NMOG	E85	bE	1	California other than South Coast	0.00000	0.00530	0.00000	0.00000
NMOG	CNG	nC	1	California other than South Coast	0.00000	0.00371	0.01328	0.00000
NMOG	LNG	nL	1	California other than South Coast	0.00000	0.00000	0.00049	0.00000
NMOG	H2	nH	1	California other than South Coast	0.00000	0.00000	0.00689	0.00000
NMOG	Elect	xJ	1	California other than South Coast	0.03009	0.00481	0.00000	0.00000
NMOG	Gasoline	oG	2	California other than South Coast	0.01617	0.00145	0.00000	0.00000
NMOG	RFG	oR	2	California other than South Coast	0.01710	0.00164	0.00000	0.00000
NMOG	Diesel	oD	2	California other than South Coast	0.00531	0.00073	0.00000	0.00000
NMOG	LPG	oP	2	California other than South Coast	0.00078	0.00020	0.00000	0.00000
NMOG	M85	nN	2	California other than South Coast	0.00000	0.00446	0.00037	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
NMOG	M85	bN	2	California other than South Coast	0.04767	0.07357	0.00035	0.00000
NMOG	M100	nM	2	California other than South Coast	0.00000	0.00000	0.00047	0.00000
NMOG	E85	bE	2	California other than South Coast	0.00000	0.00452	0.00058	0.00000
NMOG	CNG	nC	2	California other than South Coast	0.00000	0.00000	0.00787	0.00000
NMOG	LNG	nL	2	California other than South Coast	0.00032	0.00537	0.06356	0.00000
NMOG	LH2	nH	2	California other than South Coast	0.00038	0.01993	0.00029	0.00000
NMOG	Elect	xJ	2	California other than South Coast	0.01094	0.00264	0.00000	0.00000
NMOG	Gasoline	oG	3	California other than South Coast	0.01617	0.00145	0.00000	0.00000
NMOG	RFG	oR	3	California other than South Coast	0.01710	0.00164	0.00000	0.00000
NMOG	Diesel	oD	3	California other than South Coast	0.00531	0.00073	0.00000	0.00000
NMOG	LPG	oP	3	California other than South Coast	0.00078	0.00020	0.00000	0.00000
NMOG	M85	nN	3	California other than South Coast	0.00000	0.00439	0.00037	0.00000
NMOG	M85	bN	3	California other than South Coast	0.04767	0.07372	0.00018	0.00000
NMOG	M100	nM	3	California other than South Coast	0.00000	0.00000	0.00047	0.00000
NMOG	E84	bE	3	California other than South Coast	0.06307	0.04734	0.00009	0.00000
NMOG	CNG	nC	3	California other than South Coast	0.00000	0.00000	0.00756	0.00000
NMOG	LNG	nL	3	California other than South Coast	0.00030	0.00479	0.06356	0.00000
NMOG	LH2	nH	3	California other than South Coast	0.03563	0.02565	0.00029	0.00000
NMOG	Elect	xJ	3	California other than South Coast	0.00766	0.00279	0.00000	0.00000
NMOG	Gasoline	oG	4	California other than South Coast	0.01390	0.00125	0.00000	0.00000
NMOG	RFG	oR	4	California other than South Coast	0.01470	0.00141	0.00000	0.00000
NMOG	Diesel	oD	4	California other than South Coast	0.00456	0.00063	0.00000	0.00000
NMOG	LPG	oP	4	California other than South Coast	0.00066	0.00017	0.00000	0.00000
NMOG	M85	nN	4	California other than South Coast	0.00000	0.00376	0.00031	0.00000
NMOG	M85	bN	4	California other than South Coast	0.03581	0.06200	0.00003	0.00000
NMOG	M100	nM	4	California other than South Coast	0.00000	0.00000	0.00039	0.00000
NMOG	E85	bE	4	California other than South Coast	0.05318	0.00698	0.00001	0.00000
NMOG	CNG	nC	4	California other than South Coast	0.00000	0.00000	0.00442	0.00000
NMOG	LNG	nL	4	California other than South Coast	0.00026	0.00404	0.05356	0.00000
NMOG	LH2	nH	4	California other than South Coast	0.03061	0.02204	0.00025	0.00000
NMOG	Elect	xJ	4	California other than South Coast	0.00612	0.00223	0.00000	0.00000
NMOG	Gasoline	oG	1	United States except California	0.05416	0.00668	0.00000	0.00000
NMOG	RFG	oR	1	United States except California	0.05728	0.00721	0.00000	0.00000
NMOG	Diesel	oD	1	United States except California	0.01778	0.00327	0.00000	0.00000
NMOG	LPG	oP	1	United States except California	0.00269	0.00107	0.00000	0.00000
NMOG	M85	nN	1	United States except California	0.00000	0.00523	0.00069	0.00000
NMOG	M85	bN	1	United States except California	0.00037	0.01090	0.00000	0.00000
NMOG	M100	nM	1	United States except California	0.00000	0.00000	0.00090	0.00000
NMOG	E85	bE	1	United States except California	0.00000	0.00530	0.00000	0.00000
NMOG	CNG	nC	1	United States except California	0.00085	0.00950	0.03335	0.00000
NMOG	LNG	nL	1	United States except California	0.08214	0.00004	0.09726	0.00000
NMOG	H2	nH	1	United States except California	0.00000	0.00000	0.01570	0.00000
NMOG	Elect	xJ	1	United States except California	0.12786	0.00259	0.00000	0.00000
NMOG	Gasoline	oG	2	United States except California	0.03350	0.00488	0.00000	0.00000
NMOG	RFG	oR	2	United States except California	0.03543	0.00531	0.00000	0.00000
NMOG	Diesel	oD	2	United States except California	0.01100	0.00245	0.00000	0.00000
NMOG	LPG	oP	2	United States except California	0.00161	0.00085	0.00000	0.00000
NMOG	M85	nN	2	United States except California	0.00000	0.00446	0.00030	0.00000
NMOG	M85	bN	2	United States except California	0.00015	0.01044	0.00000	0.00000
NMOG	M100	nM	2	United States except California	0.00000	0.00000	0.00039	0.00000
NMOG	E85	bE	2	United States except California	0.13381	0.09644	0.04297	0.00000
NMOG	CNG	nC	2	United States except California	0.00057	0.00603	0.02999	0.00000
NMOG	LNG	nL	2	United States except California	0.03457	0.00023	0.00000	0.00000
NMOG	LH2	nH	2	United States except California	0.02358	0.01881	0.00000	0.00000
NMOG	Elect	xJ	2	United States except California	0.04909	0.00080	0.00000	0.00000
NMOG	Gasoline	oG	3	United States except California	0.03350	0.00488	0.00000	0.00000
NMOG	RFG	oR	3	United States except California	0.03543	0.00531	0.00000	0.00000
NMOG	Diesel	oD	3	United States except California	0.01100	0.00245	0.00000	0.00000
NMOG	LPG	oP	3	United States except California	0.00161	0.00085	0.00000	0.00000
NMOG	M85	nN	3	United States except California	0.00000	0.00439	0.00030	0.00000
NMOG	M85	bN	3	United States except California	0.00015	0.01044	0.00000	0.00000
NMOG	M100	nM	3	United States except California	0.00000	0.00000	0.00039	0.00000
NMOG	E84	bE	3	United States except California	0.00029	-0.00449	0.00000	0.00000
NMOG	CNG	nC	3	United States except California	0.00057	0.00603	0.02926	0.00000
NMOG	LNG	nL	3	United States except California	0.03300	0.00023	0.00000	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
NMOG	LH2	nH	3	United States except California	0.00011	0.02583	0.00000	0.00000
NMOG	Elect	xJ	3	United States except California	0.03444	0.00078	0.00000	0.00000
NMOG	Gasoline	oG	4	United States except California	0.02880	0.00419	0.00000	0.00000
NMOG	RFG	oR	4	United States except California	0.03046	0.00456	0.00000	0.00000
NMOG	Diesel	oD	4	United States except California	0.00946	0.00211	0.00000	0.00000
NMOG	LPG	oP	4	United States except California	0.00136	0.00071	0.00000	0.00000
NMOG	M85	nN	4	United States except California	0.00000	0.00376	0.00025	0.00000
NMOG	M85	bN	4	United States except California	0.00012	0.00880	0.00000	0.00000
NMOG	M100	nM	4	United States except California	0.00000	0.00000	0.00032	0.00000
NMOG	E85	bE	4	United States except California	0.00025	-0.00379	0.00000	0.00000
NMOG	CNG	nC	4	United States except California	0.00048	0.00508	0.01635	0.00000
NMOG	LNG	nL	4	United States except California	0.02783	0.00019	0.00000	0.00000
NMOG	LH2	nH	4	United States except California	0.00009	0.02219	0.00000	0.00000
NMOG	Elect	xJ	4	United States except California	0.02755	0.00062	0.00000	0.00000
NMOG	Gasoline	oG	1	Total Worldwide Emissions	0.12152	0.04598	0.01359	0.04080
NMOG	RFG	oR	1	Total Worldwide Emissions	0.12854	0.05112	0.01231	0.03813
NMOG	Diesel	oD	1	Total Worldwide Emissions	0.03989	0.01602	0.00245	0.01310
NMOG	LPG	oP	1	Total Worldwide Emissions	0.00603	0.00458	0.12571	0.91173
NMOG	M85	nN	1	Total Worldwide Emissions	0.06575	0.18243	0.00838	0.04783
NMOG	M85	bN	1	Total Worldwide Emissions	0.06640	0.24207	0.02582	0.04783
NMOG	M100	nM	1	Total Worldwide Emissions	0.08559	0.18726	0.00673	0.03537
NMOG	E85	bE	1	Total Worldwide Emissions	0.00000	0.14813	0.00526	0.04451
NMOG	CNG	nC	1	Total Worldwide Emissions	0.00141	0.01484	0.07923	0.00098
NMOG	LNG	nL	1	Total Worldwide Emissions	0.08214	0.00004	0.14214	0.00070
NMOG	H2	nH	1	Total Worldwide Emissions	0.00000	0.00000	0.02754	0.00000
NMOG	Elect	xJ	1	Total Worldwide Emissions	0.19821	0.01287	0.00000	0.00000
NMOG	Gasoline	oG	2	Total Worldwide Emissions	0.08141	0.02282	0.00746	0.03412
NMOG	RFG	oR	2	Total Worldwide Emissions	0.08610	0.02676	0.00680	0.03189
NMOG	Diesel	oD	2	Total Worldwide Emissions	0.02673	0.00826	0.00204	0.01096
NMOG	LPG	oP	2	Total Worldwide Emissions	0.00392	0.00215	0.00389	0.00393
NMOG	M85	nN	2	Total Worldwide Emissions	0.05340	0.15036	0.01622	0.04080
NMOG	M85	bN	2	Total Worldwide Emissions	0.04782	0.10271	0.00551	0.04080
NMOG	M100	nM	2	Total Worldwide Emissions	0.06818	0.15668	0.01810	0.02362
NMOG	E85	bE	2	Total Worldwide Emissions	0.13381	0.11989	0.04842	0.03793
NMOG	CNG	nC	2	Total Worldwide Emissions	0.00115	0.01205	0.06415	0.00064
NMOG	LNG	nL	2	Total Worldwide Emissions	0.06826	0.00560	0.06425	0.00057
NMOG	LH2	nH	2	Total Worldwide Emissions	0.04609	0.03874	0.00058	0.00000
NMOG	Elect	xJ	2	Total Worldwide Emissions	0.07668	0.00540	0.00000	0.00000
NMOG	Gasoline	oG	3	Total Worldwide Emissions	0.08141	0.02282	0.00746	0.02951
NMOG	RFG	oR	3	Total Worldwide Emissions	0.08610	0.02676	0.00680	0.02717
NMOG	Diesel	oD	3	Total Worldwide Emissions	0.02673	0.00826	0.00204	0.00689
NMOG	LPG	oP	3	Total Worldwide Emissions	0.00392	0.00215	0.00389	0.00000
NMOG	M85	nN	3	Total Worldwide Emissions	0.05340	0.08891	0.01622	0.03351
NMOG	M85	bN	3	Total Worldwide Emissions	0.04782	0.10286	0.00519	0.03351
NMOG	M100	nM	3	Total Worldwide Emissions	0.06818	0.07877	0.01810	0.01770
NMOG	E84	bE	3	Total Worldwide Emissions	0.06336	0.06177	0.00430	0.03220
NMOG	CNG	nC	3	Total Worldwide Emissions	0.00115	0.01205	0.06297	0.00048
NMOG	LNG	nL	3	Total Worldwide Emissions	0.06516	0.00502	0.06425	0.00057
NMOG	LH2	nH	3	Total Worldwide Emissions	0.03574	0.05148	0.00058	0.00000
NMOG	Elect	xJ	3	Total Worldwide Emissions	0.05545	0.00662	0.00000	0.00000
NMOG	Gasoline	oG	4	Total Worldwide Emissions	0.06996	0.01961	0.00334	0.01552
NMOG	RFG	oR	4	Total Worldwide Emissions	0.07402	0.02233	0.00310	0.01828
NMOG	Diesel	oD	4	Total Worldwide Emissions	0.02296	0.00709	0.00175	0.00823
NMOG	LPG	oP	4	Total Worldwide Emissions	0.00331	0.00181	0.00328	0.00331
NMOG	M85	nN	4	Total Worldwide Emissions	0.04500	0.07883	0.01344	0.02198
NMOG	M85	bN	4	Total Worldwide Emissions	0.03593	0.08655	0.00363	0.02198
NMOG	M100	nM	4	Total Worldwide Emissions	0.05590	0.12848	0.01469	0.01113
NMOG	E85	bE	4	Total Worldwide Emissions	0.05343	0.01915	0.00294	0.02123
NMOG	CNG	nC	4	Total Worldwide Emissions	0.00097	0.01016	0.04154	0.00027
NMOG	LNG	nL	4	Total Worldwide Emissions	0.05494	0.00423	0.05415	0.00048
NMOG	LH2	nH	4	Total Worldwide Emissions	0.03070	0.04423	0.00050	0.00000
NMOG	Elect	xJ	4	Total Worldwide Emissions	0.04436	0.00529	0.00000	0.00000
CH4	Gasoline	oG	1	South Coast Area	0.00000	0.01980	0.00000	0.00000
CH4	RFG	oR	1	South Coast Area	0.00000	0.02037	0.00000	0.00000
CH4	Diesel	oD	1	South Coast Area	0.00000	0.00607	0.00000	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
CH4	LPG	oP	1	South Coast Area	0.00000	0.00150	0.00000	0.00000
CH4	M85	nN	1	South Coast Area	0.00000	0.00460	0.00000	0.00000
CH4	M85	bN	1	South Coast Area	0.00000	0.00460	0.00000	0.00000
CH4	M100	nM	1	South Coast Area	0.00000	0.00000	0.00000	0.00000
CH4	E85	bE	1	South Coast Area	0.00000	0.29800	0.00000	0.00000
CH4	CNG	nC	1	South Coast Area	0.00285	0.00750	0.29486	0.01497
CH4	LNG	nL	1	South Coast Area	0.00000	0.00000	0.35518	0.00551
CH4	H2	nH	1	South Coast Area	0.00000	0.00000	0.00446	0.00000
CH4	Elect	xJ	1	South Coast Area	0.01869	0.00315	0.00000	0.00000
CH4	Gasoline	oG	2	South Coast Area	0.00000	0.00936	0.00000	0.00000
CH4	RFG	oR	2	South Coast Area	0.00000	0.00968	0.00000	0.00000
CH4	Diesel	oD	2	South Coast Area	0.00000	0.00301	0.00000	0.00000
CH4	LPG	oP	2	South Coast Area	0.00000	0.00072	0.00000	0.00000
CH4	M85	nN	2	South Coast Area	0.00000	0.00259	0.00000	0.00000
CH4	M85	bN	2	South Coast Area	0.00000	0.00259	0.00000	0.00000
CH4	M100	nM	2	South Coast Area	0.00000	0.00000	0.00000	0.00000
CH4	E85	bE	2	South Coast Area	0.00000	0.00262	0.00000	0.00000
CH4	CNG	nC	2	South Coast Area	0.00000	0.00000	0.24132	0.00972
CH4	LNG	nL	2	South Coast Area	0.00000	0.00000	0.00242	0.00447
CH4	LH2	nH	2	South Coast Area	0.00000	0.00000	0.00000	0.00000
CH4	Elect	xJ	2	South Coast Area	0.03638	0.00123	0.00000	0.00000
CH4	Gasoline	oG	3	South Coast Area	0.00000	0.00936	0.00000	0.00000
CH4	RFG	oR	3	South Coast Area	0.00000	0.00968	0.00000	0.00000
CH4	Diesel	oD	3	South Coast Area	0.00000	0.00301	0.00000	0.00000
CH4	LPG	oP	3	South Coast Area	0.00000	0.00072	0.00000	0.00000
CH4	M85	nN	3	South Coast Area	0.00000	0.00255	0.00000	0.00000
CH4	M85	bN	3	South Coast Area	0.00000	0.00259	0.00000	0.00000
CH4	M100	nM	3	South Coast Area	0.00000	0.00000	0.00000	0.00000
CH4	E84	bE	3	South Coast Area	0.00000	0.00262	0.00000	0.00000
CH4	CNG	nC	3	South Coast Area	0.00000	0.00000	0.23972	0.00729
CH4	LNG	nL	3	South Coast Area	0.00000	0.00000	0.00242	0.00447
CH4	LH2	nH	3	South Coast Area	0.00000	0.00000	0.00000	0.00000
CH4	Elect	xJ	3	South Coast Area	0.04307	0.00290	0.00000	0.00000
CH4	Gasoline	oG	4	South Coast Area	0.00000	0.00804	0.00000	0.00000
CH4	RFG	oR	4	South Coast Area	0.00000	0.00832	0.00000	0.00000
CH4	Diesel	oD	4	South Coast Area	0.00000	0.00259	0.00000	0.00000
CH4	LPG	oP	4	South Coast Area	0.00000	0.00061	0.00000	0.00000
CH4	M85	nN	4	South Coast Area	0.00000	0.00218	0.00000	0.00000
CH4	M85	bN	4	South Coast Area	0.00000	0.00218	0.00000	0.00000
CH4	M100	nM	4	South Coast Area	0.00000	0.00000	0.00000	0.00000
CH4	E85	bE	4	South Coast Area	0.00000	0.00221	0.00000	0.00000
CH4	CNG	nC	4	South Coast Area	0.00000	0.00000	0.19742	0.00410
CH4	LNG	nL	4	South Coast Area	0.00000	0.00000	0.00204	0.00377
CH4	LH2	nH	4	South Coast Area	0.00000	0.00000	0.00000	0.00000
CH4	Elect	xJ	4	South Coast Area	0.03445	0.00232	0.00000	0.00000
CH4	Gasoline	oG	1	California other than South Coast	0.00000	0.00508	0.00000	0.00000
CH4	RFG	oR	1	California other than South Coast	0.00000	0.00593	0.00000	0.00000
CH4	Diesel	oD	1	California other than South Coast	0.00000	0.00329	0.00000	0.00000
CH4	LPG	oP	1	California other than South Coast	0.00000	0.00203	0.00000	0.00000
CH4	M85	nN	1	California other than South Coast	0.00000	0.00029	0.00000	0.00000
CH4	M85	bN	1	California other than South Coast	0.00031	0.44233	0.00000	0.00000
CH4	M100	nM	1	California other than South Coast	0.00000	0.00000	0.00000	0.00000
CH4	E85	bE	1	California other than South Coast	0.00000	0.00030	0.00000	0.00000
CH4	CNG	nC	1	California other than South Coast	0.00000	0.03751	0.11616	0.00000
CH4	LNG	nL	1	California other than South Coast	0.00000	0.00000	0.00000	0.00000
CH4	H2	nH	1	California other than South Coast	0.00000	0.00000	0.00619	0.00000
CH4	Elect	xJ	1	California other than South Coast	0.29072	0.00437	0.00000	0.00000
CH4	Gasoline	oG	2	California other than South Coast	0.00000	0.00410	0.00000	0.00000
CH4	RFG	oR	2	California other than South Coast	0.00000	0.00481	0.00000	0.00000
CH4	Diesel	oD	2	California other than South Coast	0.00000	0.00268	0.00000	0.00000
CH4	LPG	oP	2	California other than South Coast	0.00000	0.00165	0.00000	0.00000
CH4	M85	nN	2	California other than South Coast	0.00000	0.00025	0.00000	0.00000
CH4	M85	bN	2	California other than South Coast	0.00015	0.17986	0.00000	0.00000
CH4	M100	nM	2	California other than South Coast	0.00000	0.00000	0.00000	0.00000
CH4	E85	bE	2	California other than South Coast	0.00000	0.00025	0.00000	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
CH4	CNG	nC	2	California other than South Coast	0.00000	0.00000	0.06609	0.00000
CH4	LNG	nL	2	California other than South Coast	0.00318	0.05200	0.55171	0.00000
CH4	LH2	nH	2	California other than South Coast	0.00372	0.01973	0.00000	0.00000
CH4	Elect	xJ	2	California other than South Coast	0.11036	0.00275	0.00000	0.00000
CH4	Gasoline	oG	3	California other than South Coast	0.00000	0.00410	0.00000	0.00000
CH4	RFG	oR	3	California other than South Coast	0.00000	0.00481	0.00000	0.00000
CH4	Diesel	oD	3	California other than South Coast	0.00000	0.00268	0.00000	0.00000
CH4	LPG	oP	3	California other than South Coast	0.00000	0.00165	0.00000	0.00000
CH4	M85	nN	3	California other than South Coast	0.00000	0.00025	0.00000	0.00000
CH4	M85	bN	3	California other than South Coast	0.00015	0.18028	0.00000	0.00000
CH4	M100	nM	3	California other than South Coast	0.00000	0.00000	0.00000	0.00000
CH4	E84	bE	3	California other than South Coast	0.00028	0.12644	0.00000	0.00000
CH4	CNG	nC	3	California other than South Coast	0.00000	0.00000	0.06528	0.00000
CH4	LNG	nL	3	California other than South Coast	0.00304	0.04621	0.55171	0.00000
CH4	LH2	nH	3	California other than South Coast	0.00011	0.02508	0.00000	0.00000
CH4	Elect	xJ	3	California other than South Coast	0.07726	0.00270	0.00000	0.00000
CH4	Gasoline	oG	4	California other than South Coast	0.00000	0.00353	0.00000	0.00000
CH4	RFG	oR	4	California other than South Coast	0.00000	0.00414	0.00000	0.00000
CH4	Diesel	oD	4	California other than South Coast	0.00000	0.00231	0.00000	0.00000
CH4	LPG	oP	4	California other than South Coast	0.00000	0.00139	0.00000	0.00000
CH4	M85	nN	4	California other than South Coast	0.00000	0.00021	0.00000	0.00000
CH4	M85	bN	4	California other than South Coast	0.00013	0.15156	0.00000	0.00000
CH4	M100	nM	4	California other than South Coast	0.00000	0.00000	0.00000	0.00000
CH4	E85	bE	4	California other than South Coast	0.00024	0.01678	0.00000	0.00000
CH4	CNG	nC	4	California other than South Coast	0.00000	0.00000	0.03518	0.00000
CH4	LNG	nL	4	California other than South Coast	0.00266	0.03894	0.46490	0.00000
CH4	LH2	nH	4	California other than South Coast	0.00010	0.02155	0.00000	0.00000
CH4	Elect	xJ	4	California other than South Coast	0.06180	0.00216	0.00000	0.00000
CH4	Gasoline	oG	1	United States except California	0.00000	0.01935	0.00000	0.00000
CH4	RFG	oR	1	United States except California	0.00000	0.02302	0.00000	0.00000
CH4	Diesel	oD	1	United States except California	0.00000	0.01321	0.00000	0.00000
CH4	LPG	oP	1	United States except California	0.00000	0.00895	0.00000	0.00000
CH4	M85	nN	1	United States except California	0.00000	0.00029	0.00000	0.00000
CH4	M85	bN	1	United States except California	0.00033	0.00539	0.00000	0.00000
CH4	M100	nM	1	United States except California	0.00000	0.00000	0.00000	0.00000
CH4	E85	bE	1	United States except California	0.00000	0.00030	0.00000	0.00000
CH4	CNG	nC	1	United States except California	0.00856	0.09602	0.29578	0.00000
CH4	LNG	nL	1	United States except California	0.83052	0.00003	0.67928	0.00000
CH4	H2	nH	1	United States except California	0.00000	0.00000	0.01411	0.00000
CH4	Elect	xJ	1	United States except California	1.28731	0.00199	0.00000	0.00000
CH4	Gasoline	oG	2	United States except California	0.00000	0.01598	0.00000	0.00000
CH4	RFG	oR	2	United States except California	0.00000	0.01904	0.00000	0.00000
CH4	Diesel	oD	2	United States except California	0.00000	0.01095	0.00000	0.00000
CH4	LPG	oP	2	United States except California	0.00000	0.00727	0.00000	0.00000
CH4	M85	nN	2	United States except California	0.00000	0.00025	0.00000	0.00000
CH4	M85	bN	2	United States except California	0.00014	0.00607	0.00000	0.00000
CH4	M100	nM	2	United States except California	0.00000	0.00000	0.00000	0.00000
CH4	E85	bE	2	United States except California	0.00039	0.24806	0.00000	0.00000
CH4	CNG	nC	2	United States except California	0.00579	0.06092	0.27092	0.00000
CH4	LNG	nL	2	United States except California	0.34942	0.00022	0.00000	0.00000
CH4	LH2	nH	2	United States except California	0.23789	0.01830	0.00000	0.00000
CH4	Elect	xJ	2	United States except California	0.49320	0.00073	0.00000	0.00000
CH4	Gasoline	oG	3	United States except California	0.00000	0.01598	0.00000	0.00000
CH4	RFG	oR	3	United States except California	0.00000	0.01904	0.00000	0.00000
CH4	Diesel	oD	3	United States except California	0.00000	0.01095	0.00000	0.00000
CH4	LPG	oP	3	United States except California	0.00000	0.00727	0.00000	0.00000
CH4	M85	nN	3	United States except California	0.00000	0.00025	0.00000	0.00000
CH4	M85	bN	3	United States except California	0.00014	0.00607	0.00000	0.00000
CH4	M100	nM	3	United States except California	0.00000	0.00000	0.00000	0.00000
CH4	E84	bE	3	United States except California	0.00029	-0.00851	0.00000	0.00000
CH4	CNG	nC	3	United States except California	0.00579	0.06092	0.26899	0.00000
CH4	LNG	nL	3	United States except California	0.33354	0.00022	0.00000	0.00000
CH4	LH2	nH	3	United States except California	0.00011	0.02513	0.00000	0.00000
CH4	Elect	xJ	3	United States except California	0.34532	0.00060	0.00000	0.00000
CH4	Gasoline	oG	4	United States except California	0.00000	0.01373	0.00000	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
CH4	RFG	oR	4	United States except California	0.00000	0.01636	0.00000	0.00000
CH4	Diesel	oD	4	United States except California	0.00000	0.00941	0.00000	0.00000
CH4	LPG	oP	4	United States except California	0.00000	0.00612	0.00000	0.00000
CH4	M85	nN	4	United States except California	0.00000	0.00021	0.00000	0.00000
CH4	M85	bN	4	United States except California	0.00012	0.00512	0.00000	0.00000
CH4	M100	nM	4	United States except California	0.00000	0.00000	0.00000	0.00000
CH4	E85	bE	4	United States except California	0.00024	-0.00718	0.00000	0.00000
CH4	CNG	nC	4	United States except California	0.00488	0.05136	0.14268	0.00000
CH4	LNG	nL	4	United States except California	0.28150	0.00019	0.00000	0.00000
CH4	LH2	nH	4	United States except California	0.00009	0.02159	0.00000	0.00000
CH4	Elect	xJ	4	United States except California	0.27625	0.00048	0.00000	0.00000
CH4	Gasoline	oG	1	Total Worldwide Emissions	0.00000	0.04849	0.00000	0.00000
CH4	RFG	oR	1	Total Worldwide Emissions	0.00000	0.05510	0.00000	0.00000
CH4	Diesel	oD	1	Total Worldwide Emissions	0.00000	0.02570	0.00000	0.00000
CH4	LPG	oP	1	Total Worldwide Emissions	0.00000	0.01485	0.00000	0.00000
CH4	M85	nN	1	Total Worldwide Emissions	0.66473	0.39281	0.00000	0.00000
CH4	M85	bN	1	Total Worldwide Emissions	0.00065	0.45321	0.00000	0.00000
CH4	M100	nM	1	Total Worldwide Emissions	0.86531	0.50344	0.00000	0.00000
CH4	E85	bE	1	Total Worldwide Emissions	0.00000	0.29949	0.00000	0.00000
CH4	CNG	nC	1	Total Worldwide Emissions	0.01426	0.15003	0.73312	0.01497
CH4	LNG	nL	1	Total Worldwide Emissions	0.83052	0.00003	1.03446	0.00551
CH4	H2	nH	1	Total Worldwide Emissions	0.00000	0.00000	0.02476	0.00000
CH4	Elect	xJ	1	Total Worldwide Emissions	1.94248	0.00951	0.00000	0.00000
CH4	Gasoline	oG	2	Total Worldwide Emissions	0.00000	0.03300	0.00000	0.00000
CH4	RFG	oR	2	Total Worldwide Emissions	0.00000	0.03836	0.00000	0.00000
CH4	Diesel	oD	2	Total Worldwide Emissions	0.00000	0.01927	0.00000	0.00000
CH4	LPG	oP	2	Total Worldwide Emissions	0.00000	0.01156	0.00000	0.00000
CH4	M85	nN	2	Total Worldwide Emissions	0.53998	0.33881	0.00000	0.00000
CH4	M85	bN	2	Total Worldwide Emissions	0.00029	0.18927	0.00000	0.00000
CH4	M100	nM	2	Total Worldwide Emissions	0.68931	0.42759	0.00000	0.00000
CH4	E85	bE	2	Total Worldwide Emissions	0.00039	0.25169	0.00000	0.00000
CH4	CNG	nC	2	Total Worldwide Emissions	0.01158	0.12184	0.60360	0.00972
CH4	LNG	nL	2	Total Worldwide Emissions	0.68999	0.05222	0.55413	0.00447
CH4	LH2	nH	2	Total Worldwide Emissions	0.46544	0.03803	0.00000	0.00000
CH4	Elect	xJ	2	Total Worldwide Emissions	0.77238	0.00470	0.00000	0.00000
CH4	Gasoline	oG	3	Total Worldwide Emissions	0.00000	0.03300	0.00000	0.00000
CH4	RFG	oR	3	Total Worldwide Emissions	0.00000	0.03836	0.00000	0.00000
CH4	Diesel	oD	3	Total Worldwide Emissions	0.00000	0.01927	0.00000	0.00000
CH4	LPG	oP	3	Total Worldwide Emissions	0.00000	0.01156	0.00000	0.00000
CH4	M85	nN	3	Total Worldwide Emissions	0.53998	0.17329	0.00000	0.00000
CH4	M85	bN	3	Total Worldwide Emissions	0.00029	0.18969	0.00000	0.00000
CH4	M100	nM	3	Total Worldwide Emissions	0.68931	0.21638	0.00000	0.00000
CH4	E84	bE	3	Total Worldwide Emissions	0.00057	0.12131	0.00000	0.00000
CH4	CNG	nC	3	Total Worldwide Emissions	0.01158	0.12184	0.59925	0.00729
CH4	LNG	nL	3	Total Worldwide Emissions	0.65862	0.04643	0.55413	0.00447
CH4	LH2	nH	3	Total Worldwide Emissions	0.00022	0.05021	0.00000	0.00000
CH4	Elect	xJ	3	Total Worldwide Emissions	0.55834	0.00620	0.00000	0.00000
CH4	Gasoline	oG	4	Total Worldwide Emissions	0.00000	0.02836	0.00000	0.00000
CH4	RFG	oR	4	Total Worldwide Emissions	0.00000	0.03298	0.00000	0.00000
CH4	Diesel	oD	4	Total Worldwide Emissions	0.00000	0.01656	0.00000	0.00000
CH4	LPG	oP	4	Total Worldwide Emissions	0.00000	0.00974	0.00000	0.00000
CH4	M85	nN	4	Total Worldwide Emissions	0.45502	0.15495	0.00000	0.00000
CH4	M85	bN	4	Total Worldwide Emissions	0.00025	0.15949	0.00000	0.00000
CH4	M100	nM	4	Total Worldwide Emissions	0.56524	0.35063	0.00000	0.00000
CH4	E85	bE	4	Total Worldwide Emissions	0.00048	0.01246	0.00000	0.00000
CH4	CNG	nC	4	Total Worldwide Emissions	0.00977	0.10272	0.38842	0.00410
CH4	LNG	nL	4	Total Worldwide Emissions	0.55559	0.03913	0.46694	0.00377
CH4	LH2	nH	4	Total Worldwide Emissions	0.00019	0.04314	0.00000	0.00000
CH4	Elect	xJ	4	Total Worldwide Emissions	0.44667	0.00496	0.00000	0.00000
NOx	Gasoline	oG	1	South Coast Area	0.00171	0.01795	0.00601	0.00000
NOx	RFG	oR	1	South Coast Area	0.00181	0.01787	0.00614	0.00000
NOx	Diesel	oD	1	South Coast Area	0.00056	0.00811	0.00531	0.00000
NOx	LPG	oP	1	South Coast Area	0.00008	0.00353	0.00710	0.00000
NOx	M85	nN	1	South Coast Area	0.00000	0.00308	0.01245	0.00000
NOx	M85	bN	1	South Coast Area	0.00000	0.00308	0.02236	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
NOx	M100	nM	1	South Coast Area	0.00000	0.00000	0.00165	0.00000
NOx	E85	bE	1	South Coast Area	0.00000	0.07528	0.00879	0.00000
NOx	CNG	nC	1	South Coast Area	0.00000	0.00000	0.00558	0.00000
NOx	LNG	nL	1	South Coast Area	0.00000	0.00000	0.00674	0.00000
NOx	H2	nH	1	South Coast Area	0.00000	0.00000	0.02860	0.00000
NOx	Elect	xJ	1	South Coast Area	0.00008	0.02939	0.00000	0.00000
NOx	Gasoline	oG	2	South Coast Area	0.00055	0.00933	0.00201	0.00000
NOx	RFG	oR	2	South Coast Area	0.00059	0.00914	0.00205	0.00000
NOx	Diesel	oD	2	South Coast Area	0.00018	0.00383	0.00177	0.00000
NOx	LPG	oP	2	South Coast Area	0.00002	0.00080	0.00231	0.00000
NOx	M85	nN	2	South Coast Area	0.00000	0.00301	0.00489	0.00000
NOx	M85	bN	2	South Coast Area	0.00000	0.00301	0.00381	0.00000
NOx	M100	nM	2	South Coast Area	0.00000	0.00000	0.00561	0.00000
NOx	E85	bE	2	South Coast Area	0.00000	0.00304	0.00806	0.00000
NOx	CNG	nC	2	South Coast Area	0.00000	0.00000	0.00427	0.00000
NOx	LNG	nL	2	South Coast Area	0.00000	0.00000	0.00219	0.00000
NOx	LH2	nH	2	South Coast Area	0.00000	0.00000	0.00161	0.00000
NOx	Elect	xJ	2	South Coast Area	0.00016	0.01213	0.00000	0.00000
NOx	Gasoline	oG	3	South Coast Area	0.00055	0.00933	0.00201	0.00000
NOx	RFG	oR	3	South Coast Area	0.00059	0.00914	0.00205	0.00000
NOx	Diesel	oD	3	South Coast Area	0.00018	0.00383	0.00177	0.00000
NOx	LPG	oP	3	South Coast Area	0.00002	0.00080	0.00231	0.00000
NOx	M85	nN	3	South Coast Area	0.00000	0.00296	0.00489	0.00000
NOx	M85	bN	3	South Coast Area	0.00000	0.00301	0.00381	0.00000
NOx	M100	nM	3	South Coast Area	0.00000	0.00000	0.00561	0.00000
NOx	E84	bE	3	South Coast Area	0.00000	0.00304	0.00300	0.00000
NOx	CNG	nC	3	South Coast Area	0.00000	0.00000	0.00357	0.00000
NOx	LNG	nL	3	South Coast Area	0.00000	0.00000	0.00219	0.00000
NOx	LH2	nH	3	South Coast Area	0.00000	0.00000	0.00161	0.00000
NOx	Elect	xJ	3	South Coast Area	0.00018	0.01030	0.00000	0.00000
NOx	Gasoline	oG	4	South Coast Area	0.00048	0.00802	0.00173	0.00000
NOx	RFG	oR	4	South Coast Area	0.00051	0.00786	0.00176	0.00000
NOx	Diesel	oD	4	South Coast Area	0.00016	0.00329	0.00153	0.00000
NOx	LPG	oP	4	South Coast Area	0.00002	0.00067	0.00194	0.00000
NOx	M85	nN	4	South Coast Area	0.00000	0.00253	0.00412	0.00000
NOx	M85	bN	4	South Coast Area	0.00000	0.00253	0.00321	0.00000
NOx	M100	nM	4	South Coast Area	0.00000	0.00000	0.00461	0.00000
NOx	E85	bE	4	South Coast Area	0.00000	0.00257	0.00253	0.00000
NOx	CNG	nC	4	South Coast Area	0.00000	0.00000	0.00301	0.00000
NOx	LNG	nL	4	South Coast Area	0.00000	0.00000	0.00185	0.00000
NOx	LH2	nH	4	South Coast Area	0.00000	0.00000	0.00138	0.00000
NOx	Elect	xJ	4	South Coast Area	0.00015	0.00824	0.00000	0.00000
NOx	Gasoline	oG	1	California other than South Coast	0.00684	0.00984	0.00000	0.00000
NOx	RFG	oR	1	California other than South Coast	0.00723	0.01028	0.00000	0.00000
NOx	Diesel	oD	1	California other than South Coast	0.00225	0.00436	0.00000	0.00000
NOx	LPG	oP	1	California other than South Coast	0.00034	0.00038	0.00000	0.00000
NOx	M85	nN	1	California other than South Coast	0.00000	0.00192	0.01521	0.00000
NOx	M85	bN	1	California other than South Coast	0.40851	0.15748	0.17880	0.00000
NOx	M100	nM	1	California other than South Coast	0.00000	0.00000	0.01980	0.00000
NOx	E85	bE	1	California other than South Coast	0.00000	0.00195	0.00000	0.00000
NOx	CNG	nC	1	California other than South Coast	0.00000	0.00000	0.02262	0.00000
NOx	LNG	nL	1	California other than South Coast	0.00000	0.00000	0.00674	0.00000
NOx	H2	nH	1	California other than South Coast	0.00000	0.00000	0.03972	0.00000
NOx	Elect	xJ	1	California other than South Coast	0.00600	0.02037	0.00000	0.00000
NOx	Gasoline	oG	2	California other than South Coast	0.00165	0.00689	0.00000	0.00000
NOx	RFG	oR	2	California other than South Coast	0.00175	0.00722	0.00000	0.00000
NOx	Diesel	oD	2	California other than South Coast	0.00054	0.00305	0.00000	0.00000
NOx	LPG	oP	2	California other than South Coast	0.00008	0.00027	0.00000	0.00000
NOx	M85	nN	2	California other than South Coast	0.00000	0.00164	0.00649	0.00000
NOx	M85	bN	2	California other than South Coast	0.27308	0.03707	0.00000	0.00000
NOx	M100	nM	2	California other than South Coast	0.00000	0.00000	0.00828	0.00000
NOx	E85	bE	2	California other than South Coast	0.00000	0.00166	0.00506	0.00000
NOx	CNG	nC	2	California other than South Coast	0.00000	0.00000	0.01457	0.00000
NOx	LNG	nL	2	California other than South Coast	0.00127	0.02182	0.00219	0.00000
NOx	LH2	nH	2	California other than South Coast	0.00505	0.12288	0.00161	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
NOx	Elect	xJ	2	California other than South Coast	0.00178	0.01348	0.00000	0.00000
NOx	Gasoline	oG	3	California other than South Coast	0.00165	0.00689	0.00000	0.00000
NOx	RFG	oR	3	California other than South Coast	0.00175	0.00722	0.00000	0.00000
NOx	Diesel	oD	3	California other than South Coast	0.00054	0.00305	0.00000	0.00000
NOx	LPG	oP	3	California other than South Coast	0.00008	0.00027	0.00000	0.00000
NOx	M85	nN	3	California other than South Coast	0.00000	0.00161	0.00649	0.00000
NOx	M85	bN	3	California other than South Coast	0.27308	0.03707	0.00000	0.00000
NOx	M100	nM	3	California other than South Coast	0.00000	0.00000	0.00828	0.00000
NOx	E84	bE	3	California other than South Coast	0.36139	0.02646	0.00000	0.00000
NOx	CNG	nC	3	California other than South Coast	0.00000	0.00000	0.01237	0.00000
NOx	LNG	nL	3	California other than South Coast	0.00122	0.01951	0.00219	0.00000
NOx	LH2	nH	3	California other than South Coast	0.20418	0.12455	0.00161	0.00000
NOx	Elect	xJ	3	California other than South Coast	0.00125	0.01593	0.00000	0.00000
NOx	Gasoline	oG	4	California other than South Coast	0.00142	0.00592	0.00000	0.00000
NOx	RFG	oR	4	California other than South Coast	0.00150	0.00621	0.00000	0.00000
NOx	Diesel	oD	4	California other than South Coast	0.00047	0.00262	0.00000	0.00000
NOx	LPG	oP	4	California other than South Coast	0.00006	0.00023	0.00000	0.00000
NOx	M85	nN	4	California other than South Coast	0.00000	0.00138	0.00547	0.00000
NOx	M85	bN	4	California other than South Coast	0.18657	0.03123	0.00000	0.00000
NOx	M100	nM	4	California other than South Coast	0.00000	0.00000	0.00679	0.00000
NOx	E85	bE	4	California other than South Coast	0.30469	0.02231	0.00000	0.00000
NOx	CNG	nC	4	California other than South Coast	0.00000	0.00000	0.01043	0.00000
NOx	LNG	nL	4	California other than South Coast	0.00154	0.01644	0.00185	0.00000
NOx	LH2	nH	4	California other than South Coast	0.17542	0.10701	0.00138	0.00000
NOx	Elect	xJ	4	California other than South Coast	0.00100	0.01274	0.00000	0.00000
NOx	Gasoline	oG	1	United States except California	0.00664	0.02256	0.00000	0.00000
NOx	RFG	oR	1	United States except California	0.00702	0.02324	0.00000	0.00000
NOx	Diesel	oD	1	United States except California	0.00218	0.01003	0.00000	0.00000
NOx	LPG	oP	1	United States except California	0.00033	0.00093	0.00000	0.00000
NOx	M85	nN	1	United States except California	0.00000	0.00192	0.01211	0.00000
NOx	M85	bN	1	United States except California	0.00212	0.03465	0.00000	0.00000
NOx	M100	nM	1	United States except California	0.00000	0.00000	0.01577	0.00000
NOx	E85	bE	1	United States except California	0.00000	0.00195	0.00000	0.00000
NOx	CNG	nC	1	United States except California	0.00000	0.00000	0.05335	0.00000
NOx	LNG	nL	1	United States except California	0.00525	0.00347	0.26957	0.00000
NOx	H2	nH	1	United States except California	0.00000	0.00000	0.09057	0.00000
NOx	Elect	xJ	1	United States except California	0.02563	0.25112	0.00000	0.00000
NOx	Gasoline	oG	2	United States except California	0.00425	0.01656	0.00000	0.00000
NOx	RFG	oR	2	United States except California	0.00450	0.01708	0.00000	0.00000
NOx	Diesel	oD	2	United States except California	0.00139	0.00737	0.00000	0.00000
NOx	LPG	oP	2	United States except California	0.00021	0.00070	0.00000	0.00000
NOx	M85	nN	2	United States except California	0.00000	0.00164	0.00529	0.00000
NOx	M85	bN	2	United States except California	0.00086	0.03688	0.00000	0.00000
NOx	M100	nM	2	United States except California	0.00000	0.00000	0.00675	0.00000
NOx	E85	bE	2	United States except California	0.38574	0.12015	0.37454	0.00000
NOx	CNG	nC	2	United States except California	0.00000	0.00000	0.03733	0.00000
NOx	LNG	nL	2	United States except California	0.00537	0.00134	0.00000	0.00000
NOx	LH2	nH	2	United States except California	0.02130	0.11081	0.00000	0.00000
NOx	Elect	xJ	2	United States except California	0.01143	0.07613	0.00000	0.00000
NOx	Gasoline	oG	3	United States except California	0.00425	0.01656	0.00000	0.00000
NOx	RFG	oR	3	United States except California	0.00450	0.01708	0.00000	0.00000
NOx	Diesel	oD	3	United States except California	0.00139	0.00737	0.00000	0.00000
NOx	LPG	oP	3	United States except California	0.00021	0.00070	0.00000	0.00000
NOx	M85	nN	3	United States except California	0.00000	0.00161	0.00529	0.00000
NOx	M85	bN	3	United States except California	0.00086	0.03688	0.00000	0.00000
NOx	M100	nM	3	United States except California	0.00000	0.00000	0.00675	0.00000
NOx	E84	bE	3	United States except California	0.00173	-0.05143	0.00000	0.00000
NOx	CNG	nC	3	United States except California	0.00000	0.00000	0.03207	0.00000
NOx	LNG	nL	3	United States except California	0.00512	0.00134	0.00000	0.00000
NOx	LH2	nH	3	United States except California	0.00064	0.15217	0.00000	0.00000
NOx	Elect	xJ	3	United States except California	0.00904	0.07320	0.00000	0.00000
NOx	Gasoline	oG	4	United States except California	0.00366	0.01424	0.00000	0.00000
NOx	RFG	oR	4	United States except California	0.00387	0.01468	0.00000	0.00000
NOx	Diesel	oD	4	United States except California	0.00120	0.00633	0.00000	0.00000
NOx	LPG	oP	4	United States except California	0.00018	0.00059	0.00000	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
NOx	M85	nN	4	United States except California	0.00000	0.00138	0.00446	0.00000
NOx	M85	bN	4	United States except California	0.00072	0.03108	0.00000	0.00000
NOx	M100	nM	4	United States except California	0.00000	0.00000	0.00553	0.00000
NOx	E85	bE	4	United States except California	0.00146	-0.04336	0.00000	0.00000
NOx	CNG	nC	4	United States except California	0.00000	0.00000	0.02704	0.00000
NOx	LNG	nL	4	United States except California	0.00648	0.00113	0.00000	0.00000
NOx	LH2	nH	4	United States except California	0.00055	0.13075	0.00000	0.00000
NOx	Elect	xJ	4	United States except California	0.00723	0.05856	0.00000	0.00000
NOx	Gasoline	oG	1	Total Worldwide Emissions	0.03522	0.05042	0.00601	0.00000
NOx	RFG	oR	1	Total Worldwide Emissions	0.03726	0.05829	0.00614	0.00000
NOx	Diesel	oD	1	Total Worldwide Emissions	0.01156	0.02255	0.00531	0.00000
NOx	LPG	oP	1	Total Worldwide Emissions	0.00175	0.00488	0.00710	0.00000
NOx	M85	nN	1	Total Worldwide Emissions	0.00420	0.10098	0.04020	0.00000
NOx	M85	bN	1	Total Worldwide Emissions	0.41063	0.20098	0.20116	0.00000
NOx	M100	nM	1	Total Worldwide Emissions	0.00547	0.11493	0.03778	0.00000
NOx	E85	bE	1	Total Worldwide Emissions	0.00000	0.08501	0.00879	0.00000
NOx	CNG	nC	1	Total Worldwide Emissions	0.00000	0.00000	0.08274	0.00000
NOx	LNG	nL	1	Total Worldwide Emissions	0.00525	0.00347	0.28304	0.00000
NOx	H2	nH	1	Total Worldwide Emissions	0.00000	0.00000	0.15889	0.00000
NOx	Elect	xJ	1	Total Worldwide Emissions	0.03729	0.30088	0.00000	0.00000
NOx	Gasoline	oG	2	Total Worldwide Emissions	0.06235	0.03284	0.00201	0.00000
NOx	RFG	oR	2	Total Worldwide Emissions	0.06594	0.03922	0.00205	0.00000
NOx	Diesel	oD	2	Total Worldwide Emissions	0.02046	0.01430	0.00177	0.00000
NOx	LPG	oP	2	Total Worldwide Emissions	0.00301	0.00180	0.00231	0.00000
NOx	M85	nN	2	Total Worldwide Emissions	0.00341	0.05859	0.20234	0.00000
NOx	M85	bN	2	Total Worldwide Emissions	0.27394	0.08187	0.00381	0.00000
NOx	M100	nM	2	Total Worldwide Emissions	0.00435	0.06049	0.25766	0.00000
NOx	E85	bE	2	Total Worldwide Emissions	0.38574	0.12983	0.38766	0.00000
NOx	CNG	nC	2	Total Worldwide Emissions	0.00000	0.00000	0.05676	0.00000
NOx	LNG	nL	2	Total Worldwide Emissions	0.00719	0.02316	0.00438	0.00000
NOx	LH2	nH	2	Total Worldwide Emissions	0.02855	0.23369	0.00322	0.00000
NOx	Elect	xJ	2	Total Worldwide Emissions	0.01550	0.10173	0.00000	0.00000
NOx	Gasoline	oG	3	Total Worldwide Emissions	0.06235	0.03284	0.00201	0.00000
NOx	RFG	oR	3	Total Worldwide Emissions	0.06594	0.03922	0.00205	0.00000
NOx	Diesel	oD	3	Total Worldwide Emissions	0.02046	0.01430	0.00177	0.00000
NOx	LPG	oP	3	Total Worldwide Emissions	0.00301	0.00180	0.00231	0.00000
NOx	M85	nN	3	Total Worldwide Emissions	0.00341	0.03597	0.20234	0.00000
NOx	M85	bN	3	Total Worldwide Emissions	0.27394	0.08187	0.00381	0.00000
NOx	M100	nM	3	Total Worldwide Emissions	0.00435	0.03184	0.25766	0.00000
NOx	E84	bE	3	Total Worldwide Emissions	0.36312	-0.01695	0.00300	0.00000
NOx	CNG	nC	3	Total Worldwide Emissions	0.00000	0.00000	0.04859	0.00000
NOx	LNG	nL	3	Total Worldwide Emissions	0.00687	0.02085	0.00438	0.00000
NOx	LH2	nH	3	Total Worldwide Emissions	0.20482	0.27672	0.00322	0.00000
NOx	Elect	xJ	3	Total Worldwide Emissions	0.01197	0.09943	0.00000	0.00000
NOx	Gasoline	oG	4	Total Worldwide Emissions	0.05358	0.02822	0.00173	0.00000
NOx	RFG	oR	4	Total Worldwide Emissions	0.05668	0.03371	0.00176	0.00000
NOx	Diesel	oD	4	Total Worldwide Emissions	0.01759	0.01229	0.00153	0.00000
NOx	LPG	oP	4	Total Worldwide Emissions	0.00253	0.00152	0.00194	0.00000
NOx	M85	nN	4	Total Worldwide Emissions	0.00287	0.04937	0.17051	0.00000
NOx	M85	bN	4	Total Worldwide Emissions	0.18729	0.06899	0.00321	0.00000
NOx	M100	nM	4	Total Worldwide Emissions	0.00357	0.04960	0.21128	0.00000
NOx	E85	bE	4	Total Worldwide Emissions	0.30615	-0.01429	0.00253	0.00000
NOx	CNG	nC	4	Total Worldwide Emissions	0.00000	0.00000	0.04098	0.00000
NOx	LNG	nL	4	Total Worldwide Emissions	0.00868	0.01757	0.00369	0.00000
NOx	LH2	nH	4	Total Worldwide Emissions	0.17597	0.23776	0.00276	0.00000
NOx	Elect	xJ	4	Total Worldwide Emissions	0.00957	0.07954	0.00000	0.00000
CO	Gasoline	oG	1	South Coast Area	0.00004	0.01043	0.00281	0.00000
CO	RFG	oR	1	South Coast Area	0.00004	0.01066	0.00287	0.00000
CO	Diesel	oD	1	South Coast Area	0.00001	0.00526	0.00248	0.00000
CO	LPG	oP	1	South Coast Area	0.00000	0.00325	0.00333	0.00000
CO	M85	nN	1	South Coast Area	0.00000	0.00225	0.00540	0.00000
CO	M85	bN	1	South Coast Area	0.00000	0.00225	0.01046	0.00000
CO	M100	nM	1	South Coast Area	0.00000	0.00000	0.00022	0.00000
CO	E85	bE	1	South Coast Area	0.00000	0.03277	0.00412	0.00000
CO	CNG	nC	1	South Coast Area	0.00000	0.00000	0.00319	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
CO	LNG	nL	1	South Coast Area	0.00000	0.00000	0.00315	0.00000
CO	H2	nH	1	South Coast Area	0.00000	0.00000	0.00436	0.00000
CO	Elect	xJ	1	South Coast Area	0.00047	0.01448	0.00000	0.00000
CO	Gasoline	oG	2	South Coast Area	0.00004	0.00268	0.00235	0.00000
CO	RFG	oR	2	South Coast Area	0.00004	0.00274	0.00240	0.00000
CO	Diesel	oD	2	South Coast Area	0.00001	0.00130	0.00208	0.00000
CO	LPG	oP	2	South Coast Area	0.00000	0.00059	0.00270	0.00000
CO	M85	nN	2	South Coast Area	0.00000	0.00067	0.00461	0.00000
CO	M85	bN	2	South Coast Area	0.00000	0.00067	0.00446	0.00000
CO	M100	nM	2	South Coast Area	0.00000	0.00000	0.00513	0.00000
CO	E85	bE	2	South Coast Area	0.00000	0.00068	0.00445	0.00000
CO	CNG	nC	2	South Coast Area	0.00000	0.00000	0.00279	0.00000
CO	LNG	nL	2	South Coast Area	0.00000	0.00000	0.00256	0.00000
CO	LH2	nH	2	South Coast Area	0.00000	0.00000	0.00188	0.00000
CO	Elect	xJ	2	South Coast Area	0.00099	0.01066	0.00000	0.00000
CO	Gasoline	oG	3	South Coast Area	0.00004	0.00268	0.00235	0.00000
CO	RFG	oR	3	South Coast Area	0.00004	0.00274	0.00240	0.00000
CO	Diesel	oD	3	South Coast Area	0.00001	0.00130	0.00208	0.00000
CO	LPG	oP	3	South Coast Area	0.00000	0.00059	0.00270	0.00000
CO	M85	nN	3	South Coast Area	0.00000	0.00066	0.00461	0.00000
CO	M85	bN	3	South Coast Area	0.00000	0.00067	0.00446	0.00000
CO	M100	nM	3	South Coast Area	0.00000	0.00000	0.00513	0.00000
CO	E84	bE	3	South Coast Area	0.00000	0.00068	0.00351	0.00000
CO	CNG	nC	3	South Coast Area	0.00000	0.00000	0.00239	0.00000
CO	LNG	nL	3	South Coast Area	0.00000	0.00000	0.00256	0.00000
CO	LH2	nH	3	South Coast Area	0.00000	0.00000	0.00188	0.00000
CO	Elect	xJ	3	South Coast Area	0.00118	0.00276	0.00000	0.00000
CO	Gasoline	oG	4	South Coast Area	0.00003	0.00230	0.00202	0.00000
CO	RFG	oR	4	South Coast Area	0.00003	0.00236	0.00207	0.00000
CO	Diesel	oD	4	South Coast Area	0.00001	0.00112	0.00178	0.00000
CO	LPG	oP	4	South Coast Area	0.00000	0.00050	0.00228	0.00000
CO	M85	nN	4	South Coast Area	0.00000	0.00056	0.00388	0.00000
CO	M85	bN	4	South Coast Area	0.00000	0.00056	0.00376	0.00000
CO	M100	nM	4	South Coast Area	0.00000	0.00000	0.00420	0.00000
CO	E85	bE	4	South Coast Area	0.00000	0.00057	0.00296	0.00000
CO	CNG	nC	4	South Coast Area	0.00000	0.00000	0.00201	0.00000
CO	LNG	nL	4	South Coast Area	0.00000	0.00000	0.00216	0.00000
CO	LH2	nH	4	South Coast Area	0.00000	0.00000	0.00162	0.00000
CO	Elect	xJ	4	South Coast Area	0.00094	0.00220	0.00000	0.00000
CO	Gasoline	oG	1	California other than South Coast	0.00002	0.00157	0.00000	0.00000
CO	RFG	oR	1	California other than South Coast	0.00002	0.00163	0.00000	0.00000
CO	Diesel	oD	1	California other than South Coast	0.00001	0.00071	0.00000	0.00000
CO	LPG	oP	1	California other than South Coast	0.00000	0.00009	0.00000	0.00000
CO	M85	nN	1	California other than South Coast	0.00000	0.00010	0.00022	0.00000
CO	M85	bN	1	California other than South Coast	0.80390	0.06857	0.08369	0.00000
CO	M100	nM	1	California other than South Coast	0.00000	0.00000	0.00028	0.00000
CO	E85	bE	1	California other than South Coast	0.00000	0.00010	0.00000	0.00000
CO	CNG	nC	1	California other than South Coast	0.00000	0.00000	0.00499	0.00000
CO	LNG	nL	1	California other than South Coast	0.00000	0.00000	0.00315	0.00000
CO	H2	nH	1	California other than South Coast	0.00000	0.00000	0.00606	0.00000
CO	Elect	xJ	1	California other than South Coast	0.00707	0.01049	0.00000	0.00000
CO	Gasoline	oG	2	California other than South Coast	0.00001	0.00113	0.00000	0.00000
CO	RFG	oR	2	California other than South Coast	0.00001	0.00118	0.00000	0.00000
CO	Diesel	oD	2	California other than South Coast	0.00000	0.00052	0.00000	0.00000
CO	LPG	oP	2	California other than South Coast	0.00000	0.00007	0.00000	0.00000
CO	M85	nN	2	California other than South Coast	0.00000	0.00008	0.00009	0.00000
CO	M85	bN	2	California other than South Coast	0.59840	0.00678	0.00000	0.00000
CO	M100	nM	2	California other than South Coast	0.00000	0.00000	0.00012	0.00000
CO	E85	bE	2	California other than South Coast	0.00000	0.00008	0.00094	0.00000
CO	CNG	nC	2	California other than South Coast	0.00000	0.00000	0.00388	0.00000
CO	LNG	nL	2	California other than South Coast	0.00191	0.03126	0.00256	0.00000
CO	LH2	nH	2	California other than South Coast	0.00223	0.05044	0.00188	0.00000
CO	Elect	xJ	2	California other than South Coast	0.00233	0.01139	0.00000	0.00000
CO	Gasoline	oG	3	California other than South Coast	0.00001	0.00113	0.00000	0.00000
CO	RFG	oR	3	California other than South Coast	0.00001	0.00118	0.00000	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
CO	Diesel	oD	3	California other than South Coast	0.00000	0.00052	0.00000	0.00000
CO	LPG	oP	3	California other than South Coast	0.00000	0.00007	0.00000	0.00000
CO	M85	nN	3	California other than South Coast	0.00000	0.00008	0.00009	0.00000
CO	M85	bN	3	California other than South Coast	0.59840	0.00678	0.00000	0.00000
CO	M100	nM	3	California other than South Coast	0.00000	0.00000	0.00012	0.00000
CO	E84	bE	3	California other than South Coast	0.79365	0.02061	0.00000	0.00000
CO	CNG	nC	3	California other than South Coast	0.00000	0.00000	0.00354	0.00000
CO	LNG	nL	3	California other than South Coast	0.00182	0.02779	0.00256	0.00000
CO	LH2	nH	3	California other than South Coast	0.44698	0.05392	0.00188	0.00000
CO	Elect	xJ	3	California other than South Coast	0.00163	0.01053	0.00000	0.00000
CO	Gasoline	oG	4	California other than South Coast	0.00001	0.00097	0.00000	0.00000
CO	RFG	oR	4	California other than South Coast	0.00001	0.00102	0.00000	0.00000
CO	Diesel	oD	4	California other than South Coast	0.00000	0.00044	0.00000	0.00000
CO	LPG	oP	4	California other than South Coast	0.00000	0.00006	0.00000	0.00000
CO	M85	nN	4	California other than South Coast	0.00000	0.00007	0.00008	0.00000
CO	M85	bN	4	California other than South Coast	0.49079	0.00571	0.00000	0.00000
CO	M100	nM	4	California other than South Coast	0.00000	0.00000	0.00010	0.00000
CO	E85	bE	4	California other than South Coast	0.66914	0.01737	0.00000	0.00000
CO	CNG	nC	4	California other than South Coast	0.00000	0.00000	0.00298	0.00000
CO	LNG	nL	4	California other than South Coast	0.00205	0.02342	0.00216	0.00000
CO	LH2	nH	4	California other than South Coast	0.38404	0.04633	0.00162	0.00000
CO	Elect	xJ	4	California other than South Coast	0.00130	0.00842	0.00000	0.00000
CO	Gasoline	oG	1	United States except California	0.00003	0.00374	0.00000	0.00000
CO	RFG	oR	1	United States except California	0.00004	0.00390	0.00000	0.00000
CO	Diesel	oD	1	United States except California	0.00001	0.00175	0.00000	0.00000
CO	LPG	oP	1	United States except California	0.00000	0.00031	0.00000	0.00000
CO	M85	nN	1	United States except California	0.00000	0.00010	0.00017	0.00000
CO	M85	bN	1	United States except California	0.00032	0.00509	0.00000	0.00000
CO	M100	nM	1	United States except California	0.00000	0.00000	0.00023	0.00000
CO	E85	bE	1	United States except California	0.00000	0.00010	0.00000	0.00000
CO	CNG	nC	1	United States except California	0.00000	0.00000	0.01217	0.00000
CO	LNG	nL	1	United States except California	0.00237	0.00020	0.12617	0.00000
CO	H2	nH	1	United States except California	0.00000	0.00000	0.01381	0.00000
CO	Elect	xJ	1	United States except California	0.02889	0.01455	0.00000	0.00000
CO	Gasoline	oG	2	United States except California	0.00002	0.00283	0.00000	0.00000
CO	RFG	oR	2	United States except California	0.00002	0.00296	0.00000	0.00000
CO	Diesel	oD	2	United States except California	0.00001	0.00133	0.00000	0.00000
CO	LPG	oP	2	United States except California	0.00000	0.00024	0.00000	0.00000
CO	M85	nN	2	United States except California	0.00000	0.00008	0.00008	0.00000
CO	M85	bN	2	United States except California	0.00013	0.00558	0.00000	0.00000
CO	M100	nM	2	United States except California	0.00000	0.00000	0.00010	0.00000
CO	E85	bE	2	United States except California	2.58822	0.05272	0.06956	0.00000
CO	CNG	nC	2	United States except California	0.00000	0.00000	0.01259	0.00000
CO	LNG	nL	2	United States except California	0.00805	0.00021	0.00000	0.00000
CO	LH2	nH	2	United States except California	0.00941	0.01728	0.00000	0.00000
CO	Elect	xJ	2	United States except California	0.01164	0.00152	0.00000	0.00000
CO	Gasoline	oG	3	United States except California	0.00002	0.00283	0.00000	0.00000
CO	RFG	oR	3	United States except California	0.00002	0.00296	0.00000	0.00000
CO	Diesel	oD	3	United States except California	0.00001	0.00133	0.00000	0.00000
CO	LPG	oP	3	United States except California	0.00000	0.00024	0.00000	0.00000
CO	M85	nN	3	United States except California	0.00000	0.00008	0.00008	0.00000
CO	M85	bN	3	United States except California	0.00013	0.00558	0.00000	0.00000
CO	M100	nM	3	United States except California	0.00000	0.00000	0.00010	0.00000
CO	E84	bE	3	United States except California	0.00027	-0.00820	0.00000	0.00000
CO	CNG	nC	3	United States except California	0.00000	0.00000	0.01176	0.00000
CO	LNG	nL	3	United States except California	0.00769	0.00021	0.00000	0.00000
CO	LH2	nH	3	United States except California	0.00010	0.02373	0.00000	0.00000
CO	Elect	xJ	3	United States except California	0.00852	0.00180	0.00000	0.00000
CO	Gasoline	oG	4	United States except California	0.00002	0.00243	0.00000	0.00000
CO	RFG	oR	4	United States except California	0.00002	0.00254	0.00000	0.00000
CO	Diesel	oD	4	United States except California	0.00001	0.00114	0.00000	0.00000
CO	LPG	oP	4	United States except California	0.00000	0.00020	0.00000	0.00000
CO	M85	nN	4	United States except California	0.00000	0.00007	0.00006	0.00000
CO	M85	bN	4	United States except California	0.00011	0.00470	0.00000	0.00000
CO	M100	nM	4	United States except California	0.00000	0.00000	0.00008	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
CO	E85	bE	4	United States except California	0.00023	-0.00691	0.00000	0.00000
CO	CNG	nC	4	United States except California	0.00000	0.00000	0.00992	0.00000
CO	LNG	nL	4	United States except California	0.00864	0.00018	0.00000	0.00000
CO	LH2	nH	4	United States except California	0.00009	0.02039	0.00000	0.00000
CO	Elect	xJ	4	United States except California	0.00681	0.00144	0.00000	0.00000
CO	Gasoline	oG	1	Total Worldwide Emissions	0.00037	0.01582	0.00281	0.00000
CO	RFG	oR	1	Total Worldwide Emissions	0.00039	0.01686	0.00287	0.00000
CO	Diesel	oD	1	Total Worldwide Emissions	0.00012	0.00779	0.00248	0.00000
CO	LPG	oP	1	Total Worldwide Emissions	0.00002	0.00370	0.00333	0.00000
CO	M85	nN	1	Total Worldwide Emissions	0.00190	0.03187	0.00595	0.00000
CO	M85	bN	1	Total Worldwide Emissions	0.80423	0.07621	0.09415	0.00000
CO	M100	nM	1	Total Worldwide Emissions	0.00247	0.03792	0.00094	0.00000
CO	E85	bE	1	Total Worldwide Emissions	0.00000	0.03326	0.00412	0.00000
CO	CNG	nC	1	Total Worldwide Emissions	0.00000	0.00000	0.02088	0.00000
CO	LNG	nL	1	Total Worldwide Emissions	0.00237	0.00020	0.13247	0.00000
CO	H2	nH	1	Total Worldwide Emissions	0.00000	0.00000	0.02423	0.00000
CO	Elect	xJ	1	Total Worldwide Emissions	0.04372	0.03951	0.00000	0.00000
CO	Gasoline	oG	2	Total Worldwide Emissions	0.00084	0.00671	0.00235	0.00000
CO	RFG	oR	2	Total Worldwide Emissions	0.00089	0.00744	0.00240	0.00000
CO	Diesel	oD	2	Total Worldwide Emissions	0.00028	0.00320	0.00208	0.00000
CO	LPG	oP	2	Total Worldwide Emissions	0.00004	0.00095	0.00270	0.00000
CO	M85	nN	2	Total Worldwide Emissions	0.00154	0.02079	0.00756	0.00000
CO	M85	bN	2	Total Worldwide Emissions	0.59853	0.01328	0.00446	0.00000
CO	M100	nM	2	Total Worldwide Emissions	0.00197	0.02516	0.00890	0.00000
CO	E85	bE	2	Total Worldwide Emissions	2.58822	0.05373	0.07495	0.00000
CO	CNG	nC	2	Total Worldwide Emissions	0.00000	0.00000	0.02004	0.00000
CO	LNG	nL	2	Total Worldwide Emissions	0.01079	0.03147	0.00512	0.00000
CO	LH2	nH	2	Total Worldwide Emissions	0.01261	0.06773	0.00376	0.00000
CO	Elect	xJ	2	Total Worldwide Emissions	0.01776	0.02357	0.00000	0.00000
CO	Gasoline	oG	3	Total Worldwide Emissions	0.00084	0.00671	0.00235	0.00000
CO	RFG	oR	3	Total Worldwide Emissions	0.00089	0.00744	0.00240	0.00000
CO	Diesel	oD	3	Total Worldwide Emissions	0.00028	0.00320	0.00208	0.00000
CO	LPG	oP	3	Total Worldwide Emissions	0.00004	0.00095	0.00270	0.00000
CO	M85	nN	3	Total Worldwide Emissions	0.00154	0.01319	0.00756	0.00000
CO	M85	bN	3	Total Worldwide Emissions	0.59853	0.01328	0.00446	0.00000
CO	M100	nM	3	Total Worldwide Emissions	0.00197	0.01547	0.00890	0.00000
CO	E84	bE	3	Total Worldwide Emissions	0.79392	0.01334	0.00351	0.00000
CO	CNG	nC	3	Total Worldwide Emissions	0.00000	0.00000	0.01848	0.00000
CO	LNG	nL	3	Total Worldwide Emissions	0.01030	0.02800	0.00512	0.00000
CO	LH2	nH	3	Total Worldwide Emissions	0.44708	0.07765	0.00376	0.00000
CO	Elect	xJ	3	Total Worldwide Emissions	0.01328	0.01509	0.00000	0.00000
CO	Gasoline	oG	4	Total Worldwide Emissions	0.00072	0.00577	0.00202	0.00000
CO	RFG	oR	4	Total Worldwide Emissions	0.00077	0.00639	0.00207	0.00000
CO	Diesel	oD	4	Total Worldwide Emissions	0.00024	0.00275	0.00178	0.00000
CO	LPG	oP	4	Total Worldwide Emissions	0.00003	0.00080	0.00228	0.00000
CO	M85	nN	4	Total Worldwide Emissions	0.00130	0.01752	0.00637	0.00000
CO	M85	bN	4	Total Worldwide Emissions	0.49091	0.01119	0.00376	0.00000
CO	M100	nM	4	Total Worldwide Emissions	0.00161	0.02063	0.00729	0.00000
CO	E85	bE	4	Total Worldwide Emissions	0.66937	0.01125	0.00296	0.00000
CO	CNG	nC	4	Total Worldwide Emissions	0.00000	0.00000	0.01557	0.00000
CO	LNG	nL	4	Total Worldwide Emissions	0.01157	0.02359	0.00432	0.00000
CO	LH2	nH	4	Total Worldwide Emissions	0.38413	0.06672	0.00323	0.00000
CO	Elect	xJ	4	Total Worldwide Emissions	0.01062	0.01207	0.00000	0.00000
CO2	Gasoline	oG	1	South Coast Area	0.47	36.26	0.55	0.12
CO2	RFG	oR	1	South Coast Area	0.50	37.03	0.56	0.12
CO2	Diesel	oD	1	South Coast Area	0.15	18.32	0.46	0.04
CO2	LPG	oP	1	South Coast Area	0.02	11.52	0.98	2.73
CO2	M85	nN	1	South Coast Area	0.00	7.78	1.04	0.07
CO2	M85	bN	1	South Coast Area	0.00	7.78	1.92	0.07
CO2	M100	nM	1	South Coast Area	0.00	0.00	0.11	0.05
CO2	E85	bE	1	South Coast Area	0.00	116.11	0.75	0.01
CO2	CNG	nC	1	South Coast Area	0.01	0.02	7.99	0.04
CO2	LNG	nL	1	South Coast Area	0.00	0.00	1.65	0.02
CO2	H2	nH	1	South Coast Area	0.00	0.00	11.39	0.00
CO2	Elect	xJ	1	South Coast Area	0.19	37.89	0.00	0.00

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
CO2	Gasoline	oG	2	South Coast Area	0.11	30.64	0.45	0.10
CO2	RFG	oR	2	South Coast Area	0.11	31.29	0.46	0.10
CO2	Diesel	oD	2	South Coast Area	0.03	15.47	0.38	0.03
CO2	LPG	oP	2	South Coast Area	0.01	9.37	0.50	0.01
CO2	M85	nN	2	South Coast Area	0.00	7.00	0.88	0.06
CO2	M85	bN	2	South Coast Area	0.00	7.00	0.82	0.06
CO2	M100	nM	2	South Coast Area	0.00	0.00	0.99	0.03
CO2	E85	bE	2	South Coast Area	0.00	7.09	1.14	0.01
CO2	CNG	nC	2	South Coast Area	0.00	0.00	15.49	0.03
CO2	LNG	nL	2	South Coast Area	0.00	0.00	0.47	0.01
CO2	LH2	nH	2	South Coast Area	0.00	0.00	0.34	0.00
CO2	Elect	xJ	2	South Coast Area	0.36	60.03	0.00	0.00
CO2	Gasoline	oG	3	South Coast Area	0.11	30.64	0.45	0.09
CO2	RFG	oR	3	South Coast Area	0.11	31.29	0.46	0.08
CO2	Diesel	oD	3	South Coast Area	0.03	15.47	0.38	0.02
CO2	LPG	oP	3	South Coast Area	0.01	9.37	0.50	0.00
CO2	M85	nN	3	South Coast Area	0.00	6.89	0.88	0.05
CO2	M85	bN	3	South Coast Area	0.00	7.00	0.82	0.05
CO2	M100	nM	3	South Coast Area	0.00	0.00	0.99	0.02
CO2	E84	bE	3	South Coast Area	0.00	7.09	0.64	0.01
CO2	CNG	nC	3	South Coast Area	0.00	0.00	13.04	0.02
CO2	LNG	nL	3	South Coast Area	0.00	0.00	0.47	0.01
CO2	LH2	nH	3	South Coast Area	0.00	0.00	0.34	0.00
CO2	Elect	xJ	3	South Coast Area	0.43	69.46	0.00	0.00
CO2	Gasoline	oG	4	South Coast Area	0.09	26.33	0.38	0.05
CO2	RFG	oR	4	South Coast Area	0.10	26.90	0.38	0.06
CO2	Diesel	oD	4	South Coast Area	0.03	13.29	0.33	0.03
CO2	LPG	oP	4	South Coast Area	0.00	7.90	0.42	0.01
CO2	M85	nN	4	South Coast Area	0.00	5.90	0.74	0.03
CO2	M85	bN	4	South Coast Area	0.00	5.90	0.69	0.03
CO2	M100	nM	4	South Coast Area	0.00	0.00	0.81	0.02
CO2	E85	bE	4	South Coast Area	0.00	5.98	0.54	0.01
CO2	CNG	nC	4	South Coast Area	0.00	0.00	10.98	0.01
CO2	LNG	nL	4	South Coast Area	0.00	0.00	0.40	0.01
CO2	LH2	nH	4	South Coast Area	0.00	0.00	0.29	0.00
CO2	Elect	xJ	4	South Coast Area	0.34	55.56	0.00	0.00
CO2	Gasoline	oG	1	California other than South Coast	1.87	3.93	0.00	0.00
CO2	RFG	oR	1	California other than South Coast	1.98	4.08	0.00	0.00
CO2	Diesel	oD	1	California other than South Coast	0.61	1.74	0.00	0.00
CO2	LPG	oP	1	California other than South Coast	0.09	0.15	0.00	0.00
CO2	M85	nN	1	California other than South Coast	0.00	0.35	0.72	0.00
CO2	M85	bN	1	California other than South Coast	30.80	102.62	15.22	0.00
CO2	M100	nM	1	California other than South Coast	0.00	0.00	0.93	0.00
CO2	E85	bE	1	California other than South Coast	0.00	0.35	0.00	0.00
CO2	CNG	nC	1	California other than South Coast	0.00	0.11	8.30	0.00
CO2	LNG	nL	1	California other than South Coast	0.00	0.00	0.57	0.00
CO2	H2	nH	1	California other than South Coast	0.00	0.00	15.82	0.00
CO2	Elect	xJ	1	California other than South Coast	2.86	21.68	0.00	0.00
CO2	Gasoline	oG	2	California other than South Coast	0.32	2.87	0.00	0.00
CO2	RFG	oR	2	California other than South Coast	0.34	2.98	0.00	0.00
CO2	Diesel	oD	2	California other than South Coast	0.11	1.27	0.00	0.00
CO2	LPG	oP	2	California other than South Coast	0.02	0.12	0.00	0.00
CO2	M85	nN	2	California other than South Coast	0.00	0.30	0.31	0.00
CO2	M85	bN	2	California other than South Coast	21.85	12.94	0.00	0.00
CO2	M100	nM	2	California other than South Coast	0.00	0.00	0.39	0.00
CO2	E85	bE	2	California other than South Coast	0.00	0.30	0.50	0.00
CO2	CNG	nC	2	California other than South Coast	0.00	0.00	6.15	0.00
CO2	LNG	nL	2	California other than South Coast	0.29	5.25	0.62	0.00
CO2	LH2	nH	2	California other than South Coast	0.39	166.57	0.34	0.00
CO2	Elect	xJ	2	California other than South Coast	0.93	26.46	0.00	0.00
CO2	Gasoline	oG	3	California other than South Coast	0.32	2.87	0.00	0.00
CO2	RFG	oR	3	California other than South Coast	0.34	2.98	0.00	0.00
CO2	Diesel	oD	3	California other than South Coast	0.11	1.27	0.00	0.00
CO2	LPG	oP	3	California other than South Coast	0.02	0.12	0.00	0.00
CO2	M85	nN	3	California other than South Coast	0.00	0.29	0.31	0.00

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
CO2	M85	bN	3	California other than South Coast	21.85	12.94	0.00	0.00
CO2	M100	nM	3	California other than South Coast	0.00	0.00	0.39	0.00
CO2	E84	bE	3	California other than South Coast	28.73	-17.75	0.00	0.00
CO2	CNG	nC	3	California other than South Coast	0.00	0.00	5.23	0.00
CO2	LNG	nL	3	California other than South Coast	0.28	4.72	0.62	0.00
CO2	LH2	nH	3	California other than South Coast	16.34	51.74	0.34	0.00
CO2	Elect	xJ	3	California other than South Coast	0.65	22.05	0.00	0.00
CO2	Gasoline	oG	4	California other than South Coast	0.28	2.46	0.00	0.00
CO2	RFG	oR	4	California other than South Coast	0.29	2.57	0.00	0.00
CO2	Diesel	oD	4	California other than South Coast	0.09	1.09	0.00	0.00
CO2	LPG	oP	4	California other than South Coast	0.01	0.10	0.00	0.00
CO2	M85	nN	4	California other than South Coast	0.00	0.25	0.26	0.00
CO2	M85	bN	4	California other than South Coast	15.64	10.90	0.00	0.00
CO2	M100	nM	4	California other than South Coast	0.00	0.00	0.32	0.00
CO2	E85	bE	4	California other than South Coast	24.22	-14.97	0.00	0.00
CO2	CNG	nC	4	California other than South Coast	0.00	0.00	4.35	0.00
CO2	LNG	nL	4	California other than South Coast	0.54	3.98	0.52	0.00
CO2	LH2	nH	4	California other than South Coast	14.04	44.46	0.29	0.00
CO2	Elect	xJ	4	California other than South Coast	0.52	17.64	0.00	0.00
CO2	Gasoline	oG	1	United States except California	2.06	9.02	0.00	0.00
CO2	RFG	oR	1	United States except California	2.18	9.28	0.00	0.00
CO2	Diesel	oD	1	United States except California	0.68	4.02	0.00	0.00
CO2	LPG	oP	1	United States except California	0.10	0.39	0.00	0.00
CO2	M85	nN	1	United States except California	0.00	0.35	0.57	0.00
CO2	M85	bN	1	United States except California	0.85	13.38	0.00	0.00
CO2	M100	nM	1	United States except California	0.00	0.00	0.74	0.00
CO2	E85	bE	1	United States except California	0.00	0.35	0.00	0.00
CO2	CNG	nC	1	United States except California	0.03	0.29	19.24	0.00
CO2	LNG	nL	1	United States except California	3.18	1.68	23.13	0.00
CO2	H2	nH	1	United States except California	0.00	0.00	36.08	0.00
CO2	Elect	xJ	1	United States except California	10.87	121.37	0.00	0.00
CO2	Gasoline	oG	2	United States except California	1.30	6.91	0.00	0.00
CO2	RFG	oR	2	United States except California	1.38	7.11	0.00	0.00
CO2	Diesel	oD	2	United States except California	0.43	3.08	0.00	0.00
CO2	LPG	oP	2	United States except California	0.06	0.31	0.00	0.00
CO2	M85	nN	2	United States except California	0.00	0.30	0.25	0.00
CO2	M85	bN	2	United States except California	0.36	14.94	0.00	0.00
CO2	M100	nM	2	United States except California	0.00	0.00	0.32	0.00
CO2	E85	bE	2	United States except California	50.37	96.72	36.76	0.00
CO2	CNG	nC	2	United States except California	0.02	0.18	15.90	0.00
CO2	LNG	nL	2	United States except California	2.24	0.56	0.00	0.00
CO2	LH2	nH	2	United States except California	2.30	46.05	0.00	0.00
CO2	Elect	xJ	2	United States except California	4.16	35.09	0.00	0.00
CO2	Gasoline	oG	3	United States except California	1.30	6.91	0.00	0.00
CO2	RFG	oR	3	United States except California	1.38	7.11	0.00	0.00
CO2	Diesel	oD	3	United States except California	0.43	3.08	0.00	0.00
CO2	LPG	oP	3	United States except California	0.06	0.31	0.00	0.00
CO2	M85	nN	3	United States except California	0.00	0.29	0.25	0.00
CO2	M85	bN	3	United States except California	0.36	14.94	0.00	0.00
CO2	M100	nM	3	United States except California	0.00	0.00	0.32	0.00
CO2	E84	bE	3	United States except California	0.72	-21.76	0.00	0.00
CO2	CNG	nC	3	United States except California	0.02	0.18	13.71	0.00
CO2	LNG	nL	3	United States except California	2.14	0.56	0.00	0.00
CO2	LH2	nH	3	United States except California	0.27	63.24	0.00	0.00
CO2	Elect	xJ	3	United States except California	2.91	34.56	0.00	0.00
CO2	Gasoline	oG	4	United States except California	1.12	5.94	0.00	0.00
CO2	RFG	oR	4	United States except California	1.18	6.11	0.00	0.00
CO2	Diesel	oD	4	United States except California	0.37	2.65	0.00	0.00
CO2	LPG	oP	4	United States except California	0.05	0.26	0.00	0.00
CO2	M85	nN	4	United States except California	0.00	0.25	0.21	0.00
CO2	M85	bN	4	United States except California	0.30	12.59	0.00	0.00
CO2	M100	nM	4	United States except California	0.00	0.00	0.26	0.00
CO2	E85	bE	4	United States except California	0.61	-18.35	0.00	0.00
CO2	CNG	nC	4	United States except California	0.01	0.15	11.31	0.00
CO2	LNG	nL	4	United States except California	3.10	0.47	0.00	0.00

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
CO2	LH2	nH	4	United States except California	0.23	54.34	0.00	0.00
CO2	Elect	xJ	4	United States except California	2.33	27.65	0.00	0.00
CO2	Gasoline	oG	1	Total Worldwide Emissions	5.54	49.24	0.55	0.12
CO2	RFG	oR	1	Total Worldwide Emissions	5.86	52.42	0.56	0.12
CO2	Diesel	oD	1	Total Worldwide Emissions	1.82	24.10	0.46	0.04
CO2	LPG	oP	1	Total Worldwide Emissions	0.28	12.08	0.98	2.73
CO2	M85	nN	1	Total Worldwide Emissions	2.55	118.68	2.36	0.07
CO2	M85	bN	1	Total Worldwide Emissions	31.65	124.83	17.14	0.07
CO2	M100	nM	1	Total Worldwide Emissions	3.31	142.10	1.83	0.05
CO2	E85	bE	1	Total Worldwide Emissions	0.00	117.87	0.75	0.01
CO2	CNG	nC	1	Total Worldwide Emissions	0.04	0.45	35.76	0.04
CO2	LNG	nL	1	Total Worldwide Emissions	3.18	1.68	25.36	0.02
CO2	H2	nH	1	Total Worldwide Emissions	0.00	0.00	63.29	0.00
CO2	Elect	xJ	1	Total Worldwide Emissions	16.84	180.94	0.00	0.00
CO2	Gasoline	oG	2	Total Worldwide Emissions	5.14	40.45	0.45	0.10
CO2	RFG	oR	2	Total Worldwide Emissions	5.44	43.08	0.46	0.10
CO2	Diesel	oD	2	Total Worldwide Emissions	1.69	19.85	0.38	0.03
CO2	LPG	oP	2	Total Worldwide Emissions	0.25	9.81	0.50	0.01
CO2	M85	nN	2	Total Worldwide Emissions	2.07	63.60	10.21	0.06
CO2	M85	bN	2	Total Worldwide Emissions	22.21	35.78	0.82	0.06
CO2	M100	nM	2	Total Worldwide Emissions	2.64	70.36	12.89	0.03
CO2	E85	bE	2	Total Worldwide Emissions	50.37	105.02	38.39	0.01
CO2	CNG	nC	2	Total Worldwide Emissions	0.03	0.36	37.82	0.03
CO2	LNG	nL	2	Total Worldwide Emissions	3.66	5.81	1.09	0.01
CO2	LH2	nH	2	Total Worldwide Emissions	3.52	212.62	0.68	0.00
CO2	Elect	xJ	2	Total Worldwide Emissions	6.58	121.57	0.00	0.00
CO2	Gasoline	oG	3	Total Worldwide Emissions	5.14	40.45	0.45	0.09
CO2	RFG	oR	3	Total Worldwide Emissions	5.44	43.08	0.46	0.08
CO2	Diesel	oD	3	Total Worldwide Emissions	1.69	19.85	0.38	0.02
CO2	LPG	oP	3	Total Worldwide Emissions	0.25	9.81	0.50	0.00
CO2	M85	nN	3	Total Worldwide Emissions	2.07	35.92	10.21	0.05
CO2	M85	bN	3	Total Worldwide Emissions	22.21	35.78	0.82	0.05
CO2	M100	nM	3	Total Worldwide Emissions	2.64	35.18	12.89	0.02
CO2	E84	bE	3	Total Worldwide Emissions	29.45	-31.52	0.64	0.01
CO2	CNG	nC	3	Total Worldwide Emissions	0.03	0.36	32.26	0.02
CO2	LNG	nL	3	Total Worldwide Emissions	3.49	5.28	1.09	0.01
CO2	LH2	nH	3	Total Worldwide Emissions	16.60	114.99	0.68	0.00
CO2	Elect	xJ	3	Total Worldwide Emissions	4.78	126.07	0.00	0.00
CO2	Gasoline	oG	4	Total Worldwide Emissions	4.42	34.76	0.38	0.05
CO2	RFG	oR	4	Total Worldwide Emissions	4.67	37.03	0.38	0.06
CO2	Diesel	oD	4	Total Worldwide Emissions	1.45	17.05	0.33	0.03
CO2	LPG	oP	4	Total Worldwide Emissions	0.21	8.27	0.42	0.01
CO2	M85	nN	4	Total Worldwide Emissions	1.74	53.10	8.60	0.03
CO2	M85	bN	4	Total Worldwide Emissions	15.94	30.15	0.69	0.03
CO2	M100	nM	4	Total Worldwide Emissions	2.16	57.70	10.57	0.02
CO2	E85	bE	4	Total Worldwide Emissions	24.83	-26.58	0.54	0.01
CO2	CNG	nC	4	Total Worldwide Emissions	0.03	0.31	26.85	0.01
CO2	LNG	nL	4	Total Worldwide Emissions	4.68	4.45	0.92	0.01
CO2	LH2	nH	4	Total Worldwide Emissions	14.27	98.80	0.59	0.00
CO2	Elect	xJ	4	Total Worldwide Emissions	3.82	100.85	0.00	0.00
BTU	Gasoline	oG	1	South Coast Area	7.4	632.8	7.2	1.8
BTU	RFG	oR	1	South Coast Area	7.8	646.3	7.3	1.7
BTU	Diesel	oD	1	South Coast Area	2.4	319.5	6.0	0.6
BTU	LPG	oP	1	South Coast Area	0.4	199.9	13.8	43.6
BTU	M85	nN	1	South Coast Area	0.0	134.7	13.5	1.2
BTU	M85	bN	1	South Coast Area	0.0	134.7	24.9	1.2
BTU	M100	nM	1	South Coast Area	0.0	0.0	1.4	0.8
BTU	E85	bE	1	South Coast Area	0.0	2142.8	9.9	1.4
BTU	CNG	nC	1	South Coast Area	0.2	0.4	601.8	0.8
BTU	LNG	nL	1	South Coast Area	0.0	0.0	27.8	0.3
BTU	H2	nH	1	South Coast Area	0.0	0.0	214.5	0.0
BTU	Elect	xJ	1	South Coast Area	3.4	566.4	0.0	0.0
BTU	Gasoline	oG	2	South Coast Area	1.6	538.2	5.9	1.5
BTU	RFG	oR	2	South Coast Area	1.7	549.7	6.0	1.4
BTU	Diesel	oD	2	South Coast Area	0.5	271.3	5.0	0.5

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
BTU	LPG	oP	2	South Coast Area	0.1	162.8	6.5	0.2
BTU	M85	nN	2	South Coast Area	0.0	124.2	11.5	1.0
BTU	M85	bN	2	South Coast Area	0.0	-124.2	10.7	1.0
BTU	M100	nM	2	South Coast Area	0.0	0.0	12.8	0.5
BTU	E85	bE	2	South Coast Area	0.0	125.7	15.1	1.2
BTU	CNG	nC	2	South Coast Area	0.0	0.0	488.6	0.5
BTU	LNG	nL	2	South Coast Area	0.0	0.0	6.2	0.3
BTU	LH2	nH	2	South Coast Area	0.0	0.0	4.4	0.0
BTU	Elect	xJ	2	South Coast Area	6.6	1102.5	0.0	0.0
BTU	Gasoline	oG	3	South Coast Area	1.6	538.2	5.9	1.3
BTU	RFG	oR	3	South Coast Area	1.7	549.7	6.0	1.2
BTU	Diesel	oD	3	South Coast Area	0.5	271.3	5.0	0.3
BTU	LPG	oP	3	South Coast Area	0.1	162.8	6.5	0.0
BTU	M85	nN	3	South Coast Area	0.0	122.3	11.5	0.8
BTU	M85	bN	3	South Coast Area	0.0	124.2	10.7	0.8
BTU	M100	nM	3	South Coast Area	0.0	0.0	12.8	0.4
BTU	E84	bE	3	South Coast Area	0.0	125.7	8.4	1.0
BTU	CNG	nC	3	South Coast Area	0.0	0.0	409.6	0.4
BTU	LNG	nL	3	South Coast Area	0.0	0.0	6.2	0.3
BTU	LH2	nH	3	South Coast Area	0.0	0.0	4.4	0.0
BTU	Elect	xJ	3	South Coast Area	7.8	1305.0	0.0	0.0
BTU	Gasoline	oG	4	South Coast Area	1.4	462.5	4.9	0.7
BTU	RFG	oR	4	South Coast Area	1.5	472.4	5.0	0.8
BTU	Diesel	oD	4	South Coast Area	0.5	233.2	4.3	0.3
BTU	LPG	oP	4	South Coast Area	0.1	137.2	5.5	0.2
BTU	M85	nN	4	South Coast Area	0.0	104.6	9.7	0.5
BTU	M85	bN	4	South Coast Area	0.0	104.6	9.0	0.5
BTU	M100	nM	4	South Coast Area	0.0	0.0	10.5	0.2
BTU	E85	bE	4	South Coast Area	0.0	106.0	7.1	0.7
BTU	CNG	nC	4	South Coast Area	0.0	0.0	345.0	0.2
BTU	LNG	nL	4	South Coast Area	0.0	0.0	5.2	0.2
BTU	LH2	nH	4	South Coast Area	0.0	0.0	3.8	0.0
BTU	Elect	xJ	4	South Coast Area	6.3	1044.0	0.0	0.0
BTU	Gasoline	oG	1	California other than South Coast	29.3	73.9	0.0	0.0
BTU	RFG	oR	1	California other than South Coast	30.9	76.8	0.0	0.0
BTU	Diesel	oD	1	California other than South Coast	9.6	32.8	0.0	0.0
BTU	LPG	oP	1	California other than South Coast	1.5	2.9	0.0	0.0
BTU	M85	nN	1	California other than South Coast	0.0	5.6	8.8	0.0
BTU	M85	bN	1	California other than South Coast	425.3	1842.4	197.9	0.0
BTU	M100	nM	1	California other than South Coast	0.0	0.0	11.4	0.0
BTU	E85	bE	1	California other than South Coast	0.0	5.7	0.0	0.0
BTU	CNG	nC	1	California other than South Coast	0.0	2.0	163.1	0.0
BTU	LNG	nL	1	California other than South Coast	0.0	0.0	7.5	0.0
BTU	H2	nH	1	California other than South Coast	0.0	0.0	297.9	0.0
BTU	Elect	xJ	1	California other than South Coast	52.6	786.7	0.0	0.0
BTU	Gasoline	oG	2	California other than South Coast	4.9	56.9	0.0	0.0
BTU	RFG	oR	2	California other than South Coast	5.2	59.2	0.0	0.0
BTU	Diesel	oD	2	California other than South Coast	1.6	25.2	0.0	0.0
BTU	LPG	oP	2	California other than South Coast	0.2	2.3	0.0	0.0
BTU	M85	nN	2	California other than South Coast	0.0	4.8	3.7	0.0
BTU	M85	bN	2	California other than South Coast	301.5	254.7	0.0	0.0
BTU	M100	nM	2	California other than South Coast	0.0	0.0	4.8	0.0
BTU	E85	bE	2	California other than South Coast	0.0	4.8	6.7	0.0
BTU	CNG	nC	2	California other than South Coast	0.0	0.0	120.9	0.0
BTU	LNG	nL	2	California other than South Coast	5.1	92.0	8.9	0.0
BTU	LH2	nH	2	California other than South Coast	6.7	3114.4	4.4	0.0
BTU	Elect	xJ	2	California other than South Coast	17.1	495.0	0.0	0.0
BTU	Gasoline	oG	3	California other than South Coast	4.9	56.9	0.0	0.0
BTU	RFG	oR	3	California other than South Coast	5.2	59.2	0.0	0.0
BTU	Diesel	oD	3	California other than South Coast	1.6	25.2	0.0	0.0
BTU	LPG	oP	3	California other than South Coast	0.2	2.3	0.0	0.0
BTU	M85	nN	3	California other than South Coast	0.0	4.7	3.7	0.0
BTU	M85	bN	3	California other than South Coast	301.5	254.7	0.0	0.0
BTU	M100	nM	3	California other than South Coast	0.0	0.0	4.8	0.0
BTU	E84	bE	3	California other than South Coast	397.5	-344.9	0.0	0.0

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
BTU	CNG	nC	3	California other than South Coast	0.0	0.0	102.7	0.0
BTU	LNG	nL	3	California other than South Coast	4.9	82.7	8.9	0.0
BTU	LH2	nH	3	California other than South Coast	225.4	-1028.0	4.4	0.0
BTU	Elect	xJ	3	California other than South Coast	12.0	405.0	0.0	0.0
BTU	Gasoline	oG	4	California other than South Coast	4.2	48.9	0.0	0.0
BTU	RFG	oR	4	California other than South Coast	4.5	50.9	0.0	0.0
BTU	Diesel	oD	4	California other than South Coast	1.4	21.7	0.0	0.0
BTU	LPG	oP	4	California other than South Coast	0.2	1.9	0.0	0.0
BTU	M85	nN	4	California other than South Coast	0.0	4.0	3.2	0.0
BTU	M85	bN	4	California other than South Coast	217.0	214.6	0.0	0.0
BTU	M100	nM	4	California other than South Coast	0.0	0.0	3.9	0.0
BTU	E85	bE	4	California other than South Coast	335.2	-296.9	0.0	0.0
BTU	CNG	nC	4	California other than South Coast	0.0	0.0	85.5	0.0
BTU	LNG	nL	4	California other than South Coast	9.7	69.7	7.5	0.0
BTU	LH2	nH	4	California other than South Coast	193.7	883.3	3.8	0.0
BTU	Elect	xJ	4	California other than South Coast	9.6	324.0	0.0	0.0
BTU	Gasoline	oG	1	United States except California	32.4	169.8	0.0	0.0
BTU	RFG	oR	1	United States except California	34.2	174.7	0.0	0.0
BTU	Diesel	oD	1	United States except California	10.6	75.6	0.0	0.0
BTU	LPG	oP	1	United States except California	1.6	7.3	0.0	0.0
BTU	M85	nN	1	United States except California	0.0	5.6	7.0	0.0
BTU	M85	bN	1	United States except California	15.9	251.0	0.0	0.0
BTU	M100	nM	1	United States except California	0.0	0.0	9.1	0.0
BTU	E85	bE	1	United States except California	0.0	5.7	0.0	0.0
BTU	CNG	nC	1	United States except California	0.5	5.2	377.7	0.0
BTU	LNG	nL	1	United States except California	58.0	24.8	301.7	0.0
BTU	H2	nH	1	United States except California	0.0	0.0	679.3	0.0
BTU	Elect	xJ	1	United States except California	199.5	1793.7	0.0	0.0
BTU	Gasoline	oG	2	United States except California	20.5	137.1	0.0	0.0
BTU	RFG	oR	2	United States except California	21.6	141.1	0.0	0.0
BTU	Diesel	oD	2	United States except California	6.7	61.1	0.0	0.0
BTU	LPG	oP	2	United States except California	1.0	6.0	0.0	0.0
BTU	M85	nN	2	United States except California	0.0	4.8	3.0	0.0
BTU	M85	bN	2	United States except California	7.1	295.8	0.0	0.0
BTU	M100	nM	2	United States except California	0.0	0.0	3.9	0.0
BTU	E85	bE	2	United States except California	740.5	795.3	492.3	0.0
BTU	CNG	nC	2	United States except California	0.3	3.3	310.8	0.0
BTU	LNG	nL	2	United States except California	39.8	11.1	0.0	0.0
BTU	LH2	nH	2	United States except California	40.5	914.9	0.0	0.0
BTU	Elect	xJ	2	United States except California	76.4	652.5	0.0	0.0
BTU	Gasoline	oG	3	United States except California	20.5	137.1	0.0	0.0
BTU	RFG	oR	3	United States except California	21.6	141.1	0.0	0.0
BTU	Diesel	oD	3	United States except California	6.7	61.1	0.0	0.0
BTU	LPG	oP	3	United States except California	1.0	6.0	0.0	0.0
BTU	M85	nN	3	United States except California	0.0	4.7	3.0	0.0
BTU	M85	bN	3	United States except California	7.1	295.8	0.0	0.0
BTU	M100	nM	3	United States except California	0.0	0.0	3.9	0.0
BTU	E84	bE	3	United States except California	14.3	-433.5	0.0	0.0
BTU	CNG	nC	3	United States except California	0.3	3.3	267.3	0.0
BTU	LNG	nL	3	United States except California	38.0	11.1	0.0	0.0
BTU	LH2	nH	3	United States except California	5.3	1256.5	0.0	0.0
BTU	Elect	xJ	3	United States except California	53.5	540.0	0.0	0.0
BTU	Gasoline	oG	4	United States except California	17.6	117.8	0.0	0.0
BTU	RFG	oR	4	United States except California	18.6	121.2	0.0	0.0
BTU	Diesel	oD	4	United States except California	5.8	52.5	0.0	0.0
BTU	LPG	oP	4	United States except California	0.8	5.0	0.0	0.0
BTU	M85	nN	4	United States except California	0.0	4.0	2.6	0.0
BTU	M85	bN	4	United States except California	6.0	249.2	0.0	0.0
BTU	M100	nM	4	United States except California	0.0	0.0	3.2	0.0
BTU	E85	bE	4	United States except California	12.1	-365.5	0.0	0.0
BTU	CNG	nC	4	United States except California	0.3	2.8	220.8	0.0
BTU	LNG	nL	4	United States except California	55.7	9.3	0.0	0.0
BTU	LH2	nH	4	United States except California	4.5	1079.6	0.0	0.0
BTU	Elect	xJ	4	United States except California	42.8	432.0	0.0	0.0
BTU	Gasoline	oG	1	Total Worldwide Emissions	83.7	877.2	7.2	1.8

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
BTU	RFG	oR	1	Total Worldwide Emissions	88.5	934.9	7.3	1.7
BTU	Diesel	oD	1	Total Worldwide Emissions	27.5	428.4	6.0	0.6
BTU	LPG	oP	1	Total Worldwide Emissions	4.2	-210.5	13.8	43.6
BTU	M85	nN	1	Total Worldwide Emissions	46.5	2236.6	29.7	1.2
BTU	M85	bN	1	Total Worldwide Emissions	441.2	2244.9	222.8	1.2
BTU	M100	nM	1	Total Worldwide Emissions	60.5	2699.6	22.5	0.8
BTU	E85	bE	1	Total Worldwide Emissions	0.0	2171.2	9.9	1.4
BTU	CNG	nC	1	Total Worldwide Emissions	0.8	8.2	1146.7	0.8
BTU	LNG	nL	1	Total Worldwide Emissions	58.0	24.8	337.0	0.3
BTU	H2	nH	1	Total Worldwide Emissions	0.0	0.0	1191.7	0.0
BTU	Elect	xJ	1	Total Worldwide Emissions	309.1	3146.9	0.0	0.0
BTU	Gasoline	oG	2	Total Worldwide Emissions	71.9	732.8	5.9	1.5
BTU	RFG	oR	2	Total Worldwide Emissions	76.0	780.9	6.0	1.4
BTU	Diesel	oD	2	Total Worldwide Emissions	23.6	358.1	5.0	0.5
BTU	LPG	oP	2	Total Worldwide Emissions	3.5	171.3	6.5	0.2
BTU	M85	nN	2	Total Worldwide Emissions	37.7	1038.4	125.5	1.0
BTU	M85	bN	2	Total Worldwide Emissions	308.6	689.0	10.7	1.0
BTU	M100	nM	2	Total Worldwide Emissions	48.2	1136.6	158.4	0.5
BTU	E85	bE	2	Total Worldwide Emissions	740.5	940.3	514.0	1.2
BTU	CNG	nC	2	Total Worldwide Emissions	0.6	6.6	925.3	0.5
BTU	LNG	nL	2	Total Worldwide Emissions	65.4	103.0	15.1	0.3
BTU	LH2	nH	2	Total Worldwide Emissions	62.3	4029.3	8.9	0.0
BTU	Elect	xJ	2	Total Worldwide Emissions	120.7	2250.0	0.0	0.0
BTU	Gasoline	oG	3	Total Worldwide Emissions	71.9	732.8	5.9	1.3
BTU	RFG	oR	3	Total Worldwide Emissions	76.0	780.9	6.0	1.2
BTU	Diesel	oD	3	Total Worldwide Emissions	23.6	358.1	5.0	0.3
BTU	LPG	oP	3	Total Worldwide Emissions	3.5	171.3	6.5	0.0
BTU	M85	nN	3	Total Worldwide Emissions	37.7	530.6	125.5	0.8
BTU	M85	bN	3	Total Worldwide Emissions	308.6	689.0	10.7	0.8
BTU	M100	nM	3	Total Worldwide Emissions	48.2	491.2	158.4	0.4
BTU	E84	bE	3	Total Worldwide Emissions	411.8	-638.2	8.4	1.0
BTU	CNG	nC	3	Total Worldwide Emissions	0.6	6.6	784.6	0.4
BTU	LNG	nL	3	Total Worldwide Emissions	62.4	93.8	15.1	0.3
BTU	LH2	nH	3	Total Worldwide Emissions	230.7	2284.5	8.9	0.0
BTU	Elect	xJ	3	Total Worldwide Emissions	87.7	2250.0	0.0	0.0
BTU	Gasoline	oG	4	Total Worldwide Emissions	61.8	629.8	4.9	0.7
BTU	RFG	oR	4	Total Worldwide Emissions	65.3	671.2	5.0	0.8
BTU	Diesel	oD	4	Total Worldwide Emissions	20.3	307.7	4.3	0.3
BTU	LPG	oP	4	Total Worldwide Emissions	2.9	144.4	5.5	0.2
BTU	M85	nN	4	Total Worldwide Emissions	31.8	866.2	105.8	0.5
BTU	M85	bN	4	Total Worldwide Emissions	223.0	580.6	9.0	0.5
BTU	M100	nM	4	Total Worldwide Emissions	39.5	932.0	129.9	0.2
BTU	E85	bE	4	Total Worldwide Emissions	347.2	-544.2	7.1	0.7
BTU	CNG	nC	4	Total Worldwide Emissions	0.5	5.6	655.1	0.2
BTU	LNG	nL	4	Total Worldwide Emissions	84.4	79.0	12.7	0.2
BTU	LH2	nH	4	Total Worldwide Emissions	198.2	1962.8	7.6	0.0
BTU	Elect	xJ	4	Total Worldwide Emissions	70.1	1800.0	0.0	0.0
VOC*MIR	Gasoline	oG	1	South Coast Area	0.01553	0.04415	0.02601	0.09186
VOC*MIR	RFG	oR	1	South Coast Area	0.01642	0.04494	0.02119	0.07331
VOC*MIR	Diesel	oD	1	South Coast Area	0.00510	0.01495	0.00326	0.01904
VOC*MIR	LPG	oP	1	South Coast Area	0.00077	0.00501	0.06178	0.43945
VOC*MIR	M85	nN	1	South Coast Area	0.00000	0.01374	0.00798	0.04908
VOC*MIR	M85	bN	1	South Coast Area	0.00000	0.01374	0.01398	0.04908
VOC*MIR	M100	nM	1	South Coast Area	0.00000	0.00000	0.00264	0.01981
VOC*MIR	E85	bE	1	South Coast Area	0.00000	0.08940	0.00787	0.05901
VOC*MIR	CNG	nC	1	South Coast Area	0.00029	0.00077	0.01934	0.00063
VOC*MIR	LNG	nL	1	South Coast Area	0.00000	0.00000	0.02488	0.00037
VOC*MIR	H2	nH	1	South Coast Area	0.00000	0.00000	0.01133	0.00000
VOC*MIR	Elect	xJ	1	South Coast Area	0.00562	0.01249	0.00000	0.00000
VOC*MIR	Gasoline	oG	2	South Coast Area	0.00629	0.01826	0.01470	0.07683
VOC*MIR	RFG	oR	2	South Coast Area	0.00665	0.01850	0.01203	0.06130
VOC*MIR	Diesel	oD	2	South Coast Area	0.00207	0.00578	0.00272	0.01593
VOC*MIR	LPG	oP	2	South Coast Area	0.00030	0.00126	0.00284	0.00189
VOC*MIR	M85	nN	2	South Coast Area	0.00000	0.00588	0.00619	0.04187
VOC*MIR	M85	bN	2	South Coast Area	0.00000	0.00588	0.00663	0.04187

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
VOC*MIR	M100	nM	2	South Coast Area	0.00000	0.00000	0.00381	0.01323
VOC*MIR	E85	bE	2	South Coast Area	0.00000	0.00595	0.00800	0.05029
VOC*MIR	CNG	nC	2	South Coast Area	0.00000	0.00000	0.01510	0.00041
VOC*MIR	LNG	nL	2	South Coast Area	0.00000	0.00000	0.00126	0.00030
VOC*MIR	LH2	nH	2	South Coast Area	0.00000	0.00000	0.00081	0.00000
VOC*MIR	Elect	xJ	2	South Coast Area	0.00368	0.00447	0.00000	0.00000
VOC*MIR	Gasoline	oG	3	South Coast Area	0.00629	0.01826	0.01470	0.06245
VOC*MIR	RFG	oR	3	South Coast Area	0.00665	0.01850	0.01203	0.04988
VOC*MIR	Diesel	oD	3	South Coast Area	0.00207	0.00578	0.00272	0.00983
VOC*MIR	LPG	oP	3	South Coast Area	0.00030	0.00126	0.00284	0.00000
VOC*MIR	M85	nN	3	South Coast Area	0.00000	0.00579	0.00619	0.03614
VOC*MIR	M85	bN	3	South Coast Area	0.00000	0.00588	0.00654	0.03614
VOC*MIR	M100	nM	3	South Coast Area	0.00000	0.00000	0.00381	0.00991
VOC*MIR	E84	bE	3	South Coast Area	0.00000	0.00595	0.00628	0.04188
VOC*MIR	CNG	nC	3	South Coast Area	0.00000	0.00000	0.01475	0.00031
VOC*MIR	LNG	nL	3	South Coast Area	0.00000	0.00000	0.00126	0.00030
VOC*MIR	LH2	nH	3	South Coast Area	0.00000	0.00000	0.00081	0.00000
VOC*MIR	Elect	xJ	3	South Coast Area	0.00436	0.00696	0.00000	0.00000
VOC*MIR	Gasoline	oG	4	South Coast Area	0.00540	0.01569	0.00708	0.02810
VOC*MIR	RFG	oR	4	South Coast Area	0.00571	0.01528	0.00586	0.03332
VOC*MIR	Diesel	oD	4	South Coast Area	0.00177	0.00496	0.00234	0.01200
VOC*MIR	LPG	oP	4	South Coast Area	0.00025	0.00107	0.00239	0.00160
VOC*MIR	M85	nN	4	South Coast Area	0.00000	0.00495	0.00500	0.02388
VOC*MIR	M85	bN	4	South Coast Area	0.00000	0.00495	0.00485	0.02388
VOC*MIR	M100	nM	4	South Coast Area	0.00000	0.00000	0.00304	0.00623
VOC*MIR	E85	bE	4	South Coast Area	0.00000	0.00502	0.00451	0.02754
VOC*MIR	CNG	nC	4	South Coast Area	0.00000	0.00000	0.01217	0.00017
VOC*MIR	LNG	nL	4	South Coast Area	0.00000	0.00000	0.00107	0.00026
VOC*MIR	LH2	nH	4	South Coast Area	0.00000	0.00000	0.00070	0.00000
VOC*MIR	Elect	xJ	4	South Coast Area	0.00348	0.00557	0.00000	0.00000
VOC*MIR	Gasoline	oG	1	California other than South Coast	0.06198	0.00424	0.00000	0.00000
VOC*MIR	RFG	oR	1	California other than South Coast	0.06557	0.00447	0.00000	0.00000
VOC*MIR	Diesel	oD	1	California other than South Coast	0.02035	0.00198	0.00000	0.00000
VOC*MIR	LPG	oP	1	California other than South Coast	0.00308	0.00034	0.00000	0.00000
VOC*MIR	M85	nN	1	California other than South Coast	0.00000	0.00575	0.00242	0.00000
VOC*MIR	M85	bN	1	California other than South Coast	0.18139	0.16664	0.03774	0.00000
VOC*MIR	M100	nM	1	California other than South Coast	0.00000	0.00000	0.00316	0.00000
VOC*MIR	E85	bE	1	California other than South Coast	0.00000	0.00583	0.00000	0.00000
VOC*MIR	CNG	nC	1	California other than South Coast	0.00000	0.00386	0.01177	0.00000
VOC*MIR	LNG	nL	1	California other than South Coast	0.00000	0.00000	0.00136	0.00000
VOC*MIR	H2	nH	1	California other than South Coast	0.00000	0.00000	0.01574	0.00000
VOC*MIR	Elect	xJ	1	California other than South Coast	0.03057	0.01099	0.00000	0.00000
VOC*MIR	Gasoline	oG	2	California other than South Coast	0.01999	0.00296	0.00000	0.00000
VOC*MIR	RFG	oR	2	California other than South Coast	0.02114	0.00314	0.00000	0.00000
VOC*MIR	Diesel	oD	2	California other than South Coast	0.00656	0.00140	0.00000	0.00000
VOC*MIR	LPG	oP	2	California other than South Coast	0.00097	0.00026	0.00000	0.00000
VOC*MIR	M85	nN	2	California other than South Coast	0.00000	0.00491	0.00103	0.00000
VOC*MIR	M85	bN	2	California other than South Coast	0.13095	0.05821	0.00019	0.00000
VOC*MIR	M100	nM	2	California other than South Coast	0.00000	0.00000	0.00132	0.00000
VOC*MIR	E85	bE	2	California other than South Coast	0.00000	0.00497	0.00161	0.00000
VOC*MIR	CNG	nC	2	California other than South Coast	0.00000	0.00000	0.00763	0.00000
VOC*MIR	LNG	nL	2	California other than South Coast	0.00018	0.00332	0.03554	0.00000
VOC*MIR	LH2	nH	2	California other than South Coast	0.00021	0.04557	0.00081	0.00000
VOC*MIR	Elect	xJ	2	California other than South Coast	0.01137	0.00604	0.00000	0.00000
VOC*MIR	Gasoline	oG	3	California other than South Coast	0.01999	0.00296	0.00000	0.00000
VOC*MIR	RFG	oR	3	California other than South Coast	0.02114	0.00314	0.00000	0.00000
VOC*MIR	Diesel	oD	3	California other than South Coast	0.00656	0.00140	0.00000	0.00000
VOC*MIR	LPG	oP	3	California other than South Coast	0.00097	0.00026	0.00000	0.00000
VOC*MIR	M85	nN	3	California other than South Coast	0.00000	0.00483	0.00103	0.00000
VOC*MIR	M85	bN	3	California other than South Coast	0.13095	0.05831	0.00010	0.00000
VOC*MIR	M100	nM	3	California other than South Coast	0.00000	0.00000	0.00132	0.00000
VOC*MIR	E84	bE	3	California other than South Coast	0.17317	0.02330	0.00012	0.00000
VOC*MIR	CNG	nC	3	California other than South Coast	0.00000	0.00000	0.00693	0.00000
VOC*MIR	LNG	nL	3	California other than South Coast	0.00017	0.00299	0.03554	0.00000
VOC*MIR	LH2	nH	3	California other than South Coast	0.09786	0.05865	0.00081	0.00000

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
VOC*MIR	Elect	xJ	3	California other than South Coast	0.00796	0.00638	0.00000	0.00000
VOC*MIR	Gasoline	oG	4	California other than South Coast	0.01719	0.00254	0.00000	0.00000
VOC*MIR	RFG	oR	4	California other than South Coast	0.01817	0.00270	0.00000	0.00000
VOC*MIR	Diesel	oD	4	California other than South Coast	0.00564	0.00120	0.00000	0.00000
VOC*MIR	LPG	oP	4	California other than South Coast	0.00082	0.00022	0.00000	0.00000
VOC*MIR	M85	nN	4	California other than South Coast	0.00000	0.00413	0.00087	0.00000
VOC*MIR	M85	bN	4	California other than South Coast	0.09819	0.04905	0.00002	0.00000
VOC*MIR	M100	nM	4	California other than South Coast	0.00000	0.00000	0.00108	0.00000
VOC*MIR	E85	bE	4	California other than South Coast	0.14601	-0.00195	0.00002	0.00000
VOC*MIR	CNG	nC	4	California other than South Coast	0.00000	0.00000	0.00473	0.00000
VOC*MIR	LNG	nL	4	California other than South Coast	0.00016	0.00252	0.02996	0.00000
VOC*MIR	LH2	nH	4	California other than South Coast	0.08408	0.05039	0.00070	0.00000
VOC*MIR	Elect	xJ	4	California other than South Coast	0.00636	0.00510	0.00000	0.00000
VOC*MIR	Gasoline	oG	1	United States except California	0.06959	0.01163	0.00000	0.00000
VOC*MIR	RFG	oR	1	United States except California	0.07362	0.01225	0.00000	0.00000
VOC*MIR	Diesel	oD	1	United States except California	0.02284	0.00548	0.00000	0.00000
VOC*MIR	LPG	oP	1	United States except California	0.00345	0.00128	0.00000	0.00000
VOC*MIR	M85	nN	1	United States except California	0.00000	0.00575	0.00193	0.00000
VOC*MIR	M85	bN	1	United States except California	0.00084	0.01871	0.00000	0.00000
VOC*MIR	M100	nM	1	United States except California	0.00000	0.00000	0.00251	0.00000
VOC*MIR	E85	bE	1	United States except California	0.00000	0.00583	0.00000	0.00000
VOC*MIR	CNG	nC	1	United States except California	0.00088	0.00987	0.02857	0.00000
VOC*MIR	LNG	nL	1	United States except California	0.05726	0.00008	0.09675	0.00000
VOC*MIR	H2	nH	1	United States except California	0.00000	0.00000	0.03588	0.00000
VOC*MIR	Elect	xJ	1	United States except California	0.13276	0.00592	0.00000	0.00000
VOC*MIR	Gasoline	oG	2	United States except California	0.04325	0.00845	0.00000	0.00000
VOC*MIR	RFG	oR	2	United States except California	0.04574	0.00894	0.00000	0.00000
VOC*MIR	Diesel	oD	2	United States except California	0.01420	0.00405	0.00000	0.00000
VOC*MIR	LPG	oP	2	United States except California	0.00208	0.00100	0.00000	0.00000
VOC*MIR	M85	nN	2	United States except California	0.00000	0.00491	0.00084	0.00000
VOC*MIR	M85	bN	2	United States except California	0.00033	0.01858	0.00000	0.00000
VOC*MIR	M100	nM	2	United States except California	0.00000	0.00000	0.00108	0.00000
VOC*MIR	E85	bE	2	United States except California	0.36423	0.06757	0.11957	0.00000
VOC*MIR	CNG	nC	2	United States except California	0.00060	0.00626	0.02458	0.00000
VOC*MIR	LNG	nL	2	United States except California	0.02393	0.00052	0.00000	0.00000
VOC*MIR	LH2	nH	2	United States except California	0.01622	0.04300	0.00000	0.00000
VOC*MIR	Elect	xJ	2	United States except California	0.05092	0.00182	0.00000	0.00000
VOC*MIR	Gasoline	oG	3	United States except California	0.04325	0.00845	0.00000	0.00000
VOC*MIR	RFG	oR	3	United States except California	0.04574	0.00894	0.00000	0.00000
VOC*MIR	Diesel	oD	3	United States except California	0.01420	0.00405	0.00000	0.00000
VOC*MIR	LPG	oP	3	United States except California	0.00208	0.00100	0.00000	0.00000
VOC*MIR	M85	nN	3	United States except California	0.00000	0.00483	0.00084	0.00000
VOC*MIR	M85	bN	3	United States except California	0.00033	0.01858	0.00000	0.00000
VOC*MIR	M100	nM	3	United States except California	0.00000	0.00000	0.00108	0.00000
VOC*MIR	E84	bE	3	United States except California	0.00067	-0.01563	0.00000	0.00000
VOC*MIR	CNG	nC	3	United States except California	0.00060	0.00626	0.02290	0.00000
VOC*MIR	LNG	nL	3	United States except California	0.02283	0.00052	0.00000	0.00000
VOC*MIR	LH2	nH	3	United States except California	0.00025	0.05905	0.00000	0.00000
VOC*MIR	Elect	xJ	3	United States except California	0.03569	0.00178	0.00000	0.00000
VOC*MIR	Gasoline	oG	4	United States except California	0.03716	0.00726	0.00000	0.00000
VOC*MIR	RFG	oR	4	United States except California	0.03932	0.00768	0.00000	0.00000
VOC*MIR	Diesel	oD	4	United States except California	0.01220	0.00348	0.00000	0.00000
VOC*MIR	LPG	oP	4	United States except California	0.00176	0.00084	0.00000	0.00000
VOC*MIR	M85	nN	4	United States except California	0.00000	0.00413	0.00071	0.00000
VOC*MIR	M85	bN	4	United States except California	0.00028	0.01566	0.00000	0.00000
VOC*MIR	M100	nM	4	United States except California	0.00000	0.00000	0.00088	0.00000
VOC*MIR	E85	bE	4	United States except California	0.00057	-0.01318	0.00000	0.00000
VOC*MIR	CNG	nC	4	United States except California	0.00050	0.00528	0.01461	0.00000
VOC*MIR	LNG	nL	4	United States except California	0.01930	0.00044	0.00000	0.00000
VOC*MIR	LH2	nH	4	United States except California	0.00021	0.05074	0.00000	0.00000
VOC*MIR	Elect	xJ	4	United States except California	0.02855	0.00142	0.00000	0.00000
VOC*MIR	Gasoline	oG	1	Total Worldwide Emissions	0.15791	0.06059	0.02601	0.09186
VOC*MIR	RFG	oR	1	Total Worldwide Emissions	0.16704	0.06429	0.02119	0.07331
VOC*MIR	Diesel	oD	1	Total Worldwide Emissions	0.05184	0.02278	0.00326	0.01904
VOC*MIR	LPG	oP	1	Total Worldwide Emissions	0.00784	0.00688	0.06178	0.43945

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
VOC*MIR	M85	nN	1	Total Worldwide Emissions	0.04583	0.14038	0.01278	0.04908
VOC*MIR	M85	bN	1	Total Worldwide Emissions	0.18223	0.21634	0.05173	0.04908
VOC*MIR	M100	nM	1	Total Worldwide Emissions	0.05966	0.12743	0.00890	0.01981
VOC*MIR	E85	bE	1	Total Worldwide Emissions	0.00000	0.11854	0.00787	0.05901
VOC*MIR	CNG	nC	1	Total Worldwide Emissions	0.00147	0.01543	0.06116	0.00063
VOC*MIR	LNG	nL	1	Total Worldwide Emissions	0.05726	0.00008	0.12299	0.00037
VOC*MIR	H2	nH	1	Total Worldwide Emissions	0.00000	0.00000	0.06294	0.00000
VOC*MIR	Elect	xJ	1	Total Worldwide Emissions	0.20455	0.02939	0.00000	0.00000
VOC*MIR	Gasoline	oG	2	Total Worldwide Emissions	0.10848	0.03055	0.01470	0.07683
VOC*MIR	RFG	oR	2	Total Worldwide Emissions	0.11473	0.03319	0.01203	0.06130
VOC*MIR	Diesel	oD	2	Total Worldwide Emissions	0.03561	0.01166	0.00272	0.01593
VOC*MIR	LPG	oP	2	Total Worldwide Emissions	0.00523	0.00275	0.00284	0.00189
VOC*MIR	M85	nN	2	Total Worldwide Emissions	0.03723	0.11403	0.03797	0.04187
VOC*MIR	M85	bN	2	Total Worldwide Emissions	0.13128	0.09739	0.00683	0.04187
VOC*MIR	M100	nM	2	Total Worldwide Emissions	0.04753	0.10674	0.04438	0.01323
VOC*MIR	E85	bE	2	Total Worldwide Emissions	0.36423	0.09339	0.12917	0.05029
VOC*MIR	CNG	nC	2	Total Worldwide Emissions	0.00119	0.01253	0.04873	0.00041
VOC*MIR	LNG	nL	2	Total Worldwide Emissions	0.04735	0.00384	0.03681	0.00030
VOC*MIR	LH2	nH	2	Total Worldwide Emissions	0.03185	0.08857	0.00162	0.00000
VOC*MIR	Elect	xJ	2	Total Worldwide Emissions	0.07960	0.01234	0.00000	0.00000
VOC*MIR	Gasoline	oG	3	Total Worldwide Emissions	0.10848	0.03055	0.01470	0.06245
VOC*MIR	RFG	oR	3	Total Worldwide Emissions	0.11473	0.03319	0.01203	0.04988
VOC*MIR	Diesel	oD	3	Total Worldwide Emissions	0.03561	0.01166	0.00272	0.00983
VOC*MIR	LPG	oP	3	Total Worldwide Emissions	0.00523	0.00275	0.00284	0.00000
VOC*MIR	M85	nN	3	Total Worldwide Emissions	0.03723	0.07255	0.03797	0.03614
VOC*MIR	M85	bN	3	Total Worldwide Emissions	0.13128	0.09749	0.00665	0.03614
VOC*MIR	M100	nM	3	Total Worldwide Emissions	0.04753	0.05438	0.04438	0.00991
VOC*MIR	E84	bE	3	Total Worldwide Emissions	0.17384	0.02852	0.00640	0.04188
VOC*MIR	CNG	nC	3	Total Worldwide Emissions	0.00119	0.01253	0.04600	0.00031
VOC*MIR	LNG	nL	3	Total Worldwide Emissions	0.04521	0.00351	0.03681	0.00030
VOC*MIR	LH2	nH	3	Total Worldwide Emissions	0.09811	0.11770	0.00162	0.00000
VOC*MIR	Elect	xJ	3	Total Worldwide Emissions	0.05755	0.01512	0.00000	0.00000
VOC*MIR	Gasoline	oG	4	Total Worldwide Emissions	0.09323	0.02625	0.00708	0.02810
VOC*MIR	RFG	oR	4	Total Worldwide Emissions	0.09862	0.02791	0.00586	0.03332
VOC*MIR	Diesel	oD	4	Total Worldwide Emissions	0.03060	0.01002	0.00234	0.01200
VOC*MIR	LPG	oP	4	Total Worldwide Emissions	0.00440	0.00232	0.00239	0.00160
VOC*MIR	M85	nN	4	Total Worldwide Emissions	0.03137	0.06469	0.03177	0.02388
VOC*MIR	M85	bN	4	Total Worldwide Emissions	0.09847	0.08206	0.00486	0.02388
VOC*MIR	M100	nM	4	Total Worldwide Emissions	0.03897	0.08753	0.03630	0.00623
VOC*MIR	E85	bE	4	Total Worldwide Emissions	0.14658	0.00244	0.00453	0.02754
VOC*MIR	CNG	nC	4	Total Worldwide Emissions	0.00100	0.01056	0.03225	0.00017
VOC*MIR	LNG	nL	4	Total Worldwide Emissions	0.03817	0.00296	0.03103	0.00026
VOC*MIR	LH2	nH	4	Total Worldwide Emissions	0.08430	0.10113	0.00139	0.00000
VOC*MIR	Elect	xJ	4	Total Worldwide Emissions	0.04604	0.01210	0.00000	0.00000
VOC*MOR	Gasoline	oG	1	South Coast Area	0.00870	0.02406	0.01290	0.04126
VOC*MOR	RFG	oR	1	South Coast Area	0.00920	0.02454	0.01077	0.03419
VOC*MOR	Diesel	oD	1	South Coast Area	0.00285	0.00773	0.00198	0.01510
VOC*MOR	LPG	oP	1	South Coast Area	0.00043	0.00226	0.03951	0.28355
VOC*MOR	M85	nN	1	South Coast Area	0.00000	0.00779	0.00382	0.02505
VOC*MOR	M85	bN	1	South Coast Area	0.00000	0.00779	0.00682	0.02505
VOC*MOR	M100	nM	1	South Coast Area	0.00000	0.00000	0.00128	0.00990
VOC*MOR	E85	bE	1	South Coast Area	0.00000	0.05521	0.00414	0.03338
VOC*MOR	CNG	nC	1	South Coast Area	0.00018	0.00048	0.01205	0.00042
VOC*MOR	LNG	nL	1	South Coast Area	0.00000	0.00000	0.01617	0.00025
VOC*MOR	H2	nH	1	South Coast Area	0.00000	0.00000	0.00457	0.00000
VOC*MOR	Elect	xJ	1	South Coast Area	0.00349	0.00502	0.00000	0.00000
VOC*MOR	Gasoline	oG	2	South Coast Area	0.00359	0.01015	0.00717	0.03451
VOC*MOR	RFG	oR	2	South Coast Area	0.00379	0.01033	0.00601	0.02859
VOC*MOR	Diesel	oD	2	South Coast Area	0.00118	0.00309	0.00166	0.01263
VOC*MOR	LPG	oP	2	South Coast Area	0.00017	0.00062	0.00155	0.00122
VOC*MOR	M85	nN	2	South Coast Area	0.00000	0.00334	0.00295	0.02137
VOC*MOR	M85	bN	2	South Coast Area	0.00000	0.00334	0.00323	0.02137
VOC*MOR	M100	nM	2	South Coast Area	0.00000	0.00000	0.00167	0.00661
VOC*MOR	E85	bE	2	South Coast Area	0.00000	0.00338	0.00406	0.02844
VOC*MOR	CNG	nC	2	South Coast Area	0.00000	0.00000	0.00951	0.00027

EMISSION	FUEL	CC	SC	LOCATION	EXTRACTIO	PRODUCTIO	MARKETING	DISTRIBUTE
VOC*MOR	LNG	nL	2	South Coast Area	0.00000	0.00000	0.00055	0.00020
VOC*MOR	LH2	nH	2	South Coast Area	0.00000	0.00000	0.00033	0.00000
VOC*MOR	Elect	xJ	2	South Coast Area	0.00231	0.00180	0.00000	0.00000
VOC*MOR	Gasoline	oG	3	South Coast Area	0.00359	0.01015	0.00717	0.02910
VOC*MOR	RFG	oR	3	South Coast Area	0.00379	0.01033	0.00601	0.02407
VOC*MOR	Diesel	oD	3	South Coast Area	0.00118	0.00309	0.00166	0.00775
VOC*MOR	LPG	oP	3	South Coast Area	0.00017	0.00062	0.00155	0.00000
VOC*MOR	M85	nN	3	South Coast Area	0.00000	0.00329	0.00295	0.01874
VOC*MOR	M85	bN	3	South Coast Area	0.00000	0.00334	0.00318	0.01874
VOC*MOR	M100	nM	3	South Coast Area	0.00000	0.00000	0.00167	0.00496
VOC*MOR	E84	bE	3	South Coast Area	0.00000	0.00338	0.00335	0.02410
VOC*MOR	CNG	nC	3	South Coast Area	0.00000	0.00000	0.00936	0.00020
VOC*MOR	LNG	nL	3	South Coast Area	0.00000	0.00000	0.00055	0.00020
VOC*MOR	LH2	nH	3	South Coast Area	0.00000	0.00000	0.00033	0.00000
VOC*MOR	Elect	xJ	3	South Coast Area	0.00273	0.00281	0.00000	0.00000
VOC*MOR	Gasoline	oG	4	South Coast Area	0.00309	0.00873	0.00330	0.01444
VOC*MOR	RFG	oR	4	South Coast Area	0.00326	0.00849	0.00280	0.01616
VOC*MOR	Diesel	oD	4	South Coast Area	0.00101	0.00266	0.00144	0.00952
VOC*MOR	LPG	oP	4	South Coast Area	0.00014	0.00052	0.00131	0.00103
VOC*MOR	M85	nN	4	South Coast Area	0.00000	0.00281	0.00237	0.01241
VOC*MOR	M85	bN	4	South Coast Area	0.00000	0.00281	0.00232	0.01241
VOC*MOR	M100	nM	4	South Coast Area	0.00000	0.00000	0.00132	0.00312
VOC*MOR	E85	bE	4	South Coast Area	0.00000	0.00285	0.00236	0.01589
VOC*MOR	CNG	nC	4	South Coast Area	0.00000	0.00000	0.00772	0.00011
VOC*MOR	LNG	nL	4	South Coast Area	0.00000	0.00000	0.00046	0.00017
VOC*MOR	LH2	nH	4	South Coast Area	0.00000	0.00000	0.00028	0.00000
VOC*MOR	Elect	xJ	4	South Coast Area	0.00218	0.00224	0.00000	0.00000

FUEL-CYCLE EMISSIONS BENEFITS OF ALTERNATIVE FUELS THE NEED TO CONSIDER MARGINAL EMISSIONS

Alternative vehicle fuels such as methanol, ethanol, and compressed natural gas are widely considered as offering a partial solution to the problem of air pollution from vehicles. Interest in alternative fuels has been especially strong in California. The emissions benefits ascribed to the use of alternative fuels include both direct reductions in pollutant emissions from the vehicles themselves and reduced emissions in the remainder of the "fuel cycle" - extraction, transportation, refining, distribution, and retail sale. As advances in conventional fuel technology, combined with more thorough evaluation of emissions from methanol and ethanol vehicles, have shown the direct emissions benefits of these fuels to be minor, advocates of these fuels have increasingly focused on claimed (but unquantified) "fuel cycle" emissions benefits as reasons for their use. The Sacramento Metropolitan Air Quality Management District is developing regulations which would give added emissions credit to users of alternative fuel vehicles, based on claimed reductions in fuel cycle emissions, and the California Air Resources Board even has underway a study to establish reactivity adjustment factors (RAFs) based on these supposed benefits. It is important to analyze the claims for fuel-cycle emissions benefits carefully, as a superficial analysis can result in serious error, and may ultimately lead to a degradation of air quality.

There is no question that the production, transportation, and distribution of petroleum fuels result in significant air pollution, especially in California and other oil-producing and refining states. There can also be little question that, <u>if</u> increased use of methanol vehicles, for instance, were to result in less gasoline being produced, refined, and distributed in California, this <u>might</u> result in lower emissions overall. Whether such a benefit would be experienced or not would depend on the degree to which gasoline production was reduced, the extent to which this reduced production resulted in lower emissions, and the quantity of emissions produced in the process of producing, transporting, and distributing the methanol, instead. This could be analyzed by simply dividing total gasoline refining and distribution emissions in California by the amount of gasoline sold, and multiplying the resulting emissions per gallon by the number of gallons of gasoline displaced by methanol. This would be simple, but would yield an incorrect and misleading response. To assess the actual extent of any emissions benefits requires a careful analysis of the effects of marginal changes in gasoline demand on the fuel supply industry.

The oil industry in California is extremely complex. Some of the state's demand for crude oil and refined products is met by internal production and refining while the remainder is met by imports of both crude oil and finished fuel stocks. In addition, California supplies refined

products to much of the West Coast, Arizona, and Nevada through an extensive network of product pipelines and through regular marine shipments along the coast. When total imports and exports are compared, the state is a net importer of crude oil and a net exporter of finished petroleum products. However, these simple statistics mask the ebb and flow characteristic of the local supply picture. For instance, while refiners are exporting gasoline stocks through pipelines to meet contractual obligations with their distributors in Arizona and Nevada, they can be receiving marine shipments of gasoline from overseas to meet spot demand in the major Bay Area or Los Angeles Area markets.

The California Energy Commission tracks the flow of motor gasoline and gasoline blendstocks into and out of the state as well as production by California refiners, based on 31 major refiners submitting data as required by the Petroleum Industry Information Reporting Act of 1980 (PIIRA). These statistics give perhaps the best picture of California-specific gasoline supply and production activities through 1992, the most recent year for which data are available. Table 1 summarizes activity in the motor gasoline market in California for the three year period ending December 31, 1992.

Table 1: Annual Production, Import, Export, Stockpile, and Delivery Activities of Major California Refiners and Distributors

Motor Gasoline and Motor Gasoline Blendstocks Thousand barrels (mb)					
Year	Refinery Output	Imports	Exports	Additions to Stocks	Net Deliveries to California
1990	349,120	20,271	42,069	N/A	316,801
1991	364,439	18,968	50,545	273	325,961
1992	347,304	19,353	41,864	(3949)	317,920

Source: *Quarterly Oil Report*, California Energy Commission, 4th Quarter 1991 and 4th Quarter 1992.

As this table shows, gasoline imports and exports represent an important component of the total California gasoline supply and demand equation. In 1992, the most recent year for which data are available, California imported 19.4 million barrels of gasoline and gasoline blendstocks, while exporting 41.9 million. Gasoline produced in California totaled 347.3 million barrels, while 317.9 million were distributed for sale in the state. What cannot be deduced from these statistics, but which is common knowledge among those familiar with the California petroleum market, is that virtually all of the imports were by tanker, via marine terminals in Los Angeles and the San Francisco Bay Area, while much of the exported

gasoline went by pipeline to Arizona and Nevada.[1] The Energy Information Administration (EIA) of the U.S. Department of Energy reported 1991 motor gasoline consumption in Arizona and Nevada of 40,579 thousand barrels and 15,347 thousand barrels, respectively, for a combined consumption of 55,926 thousand barrels.[2] This is very nearly equal to the total export of 50,545 thousand barrels of gasoline from California in 1991. Furthermore, EIA reported that there are no exports of gasoline from the region encompassing California and six other western states including Arizona and Nevada (known as the Petroleum Administration for Defense District V or PADD V).[3] Therefore, all of California's gasoline exports are going to its neighboring states. These statistics indicate that California is the primary source of gasoline supply to the Arizona and Nevada markets. These markets represent an additional 40 - 50 million barrels of firm gasoline demand annually which California refiners must meet.

These statistics also show that, currently, California is largely self-reliant for its petroleum products needs, with roughly 95% of the gasoline consumed in the state being supplied by California refiners. However, the refining industry in California is working close to capacity. The California Energy Commission reported that average 1992 statewide complex sector refinery utilization surpassed 90% of capacity, with 97% and 99% utilization in the second and third quarters, traditionally a high demand period. Taking account of the need for periodic maintenance, which is typically done in the first quarter, this is essentially full utilization. Table 2 shows the CEC's recent quarterly data on statewide refinery capacity and utilization, based again on PIIRA submittals of major refiners for the three year period ending December 31, 1992.

Table 2: Comparison of Quarterly California Refinery Capacity and Percent Utilization for the Statewide Refinery Sector

Year	Quarterly Operable Refining Capacity Thousands of barrels per day (mb/cd)				Quarterly Capacity Utilization			
	I	II	III	IV	I	II	III	IV
1990	2110.6	2200.5	2200.6	2186.0	95.2%	82.1%	90.2%	86.7%
1991	2121.2	2127.3	2109.7	2125.9	84.9%	92.3%	91.5%	87.3%
1992	1902.2	2047.2	1961.3	1952.6	92.9%	97.5%	99.3%	92.6%

[1] *Blending, Transport, and Distribution of Gasoline in California*, prepared by Energy and Environmental Analysis, Inc., for The Western States Petroleum Association, September 1990.

[2] *State Energy Data Report 1991*, U.S. Department of Energy, Energy Information Administration, May 1993.

[3] *Petroleum Supply Annual 1992: Volume 2*, U.S. Department of Energy, Energy Information Administration, 1993.

Source: *Quarterly Oil Report*, California Energy Commission, 4th Quarter 1991 and 4th Quarter 1992.

These data are shown graphically in Figure 1 which plots average daily output capacity over a period of twelve quarters. Also shown is the average daily refinery utilization, calculated as the percent capacity utilization multiplied by the reported daily output capacity, for each of the twelve quarters. Notwithstanding sharp peaks caused by seasonal or unusual circumstances, this indicates a recent statewide trend of falling refinery capacity and concurrent rising capacity utilization from that capacity still in operation. CEC cites as the primary reason for this permanent decline in capacity the closure of several refineries due to economic and environmental considerations. Also during this period, one refiner ceased operations entirely.

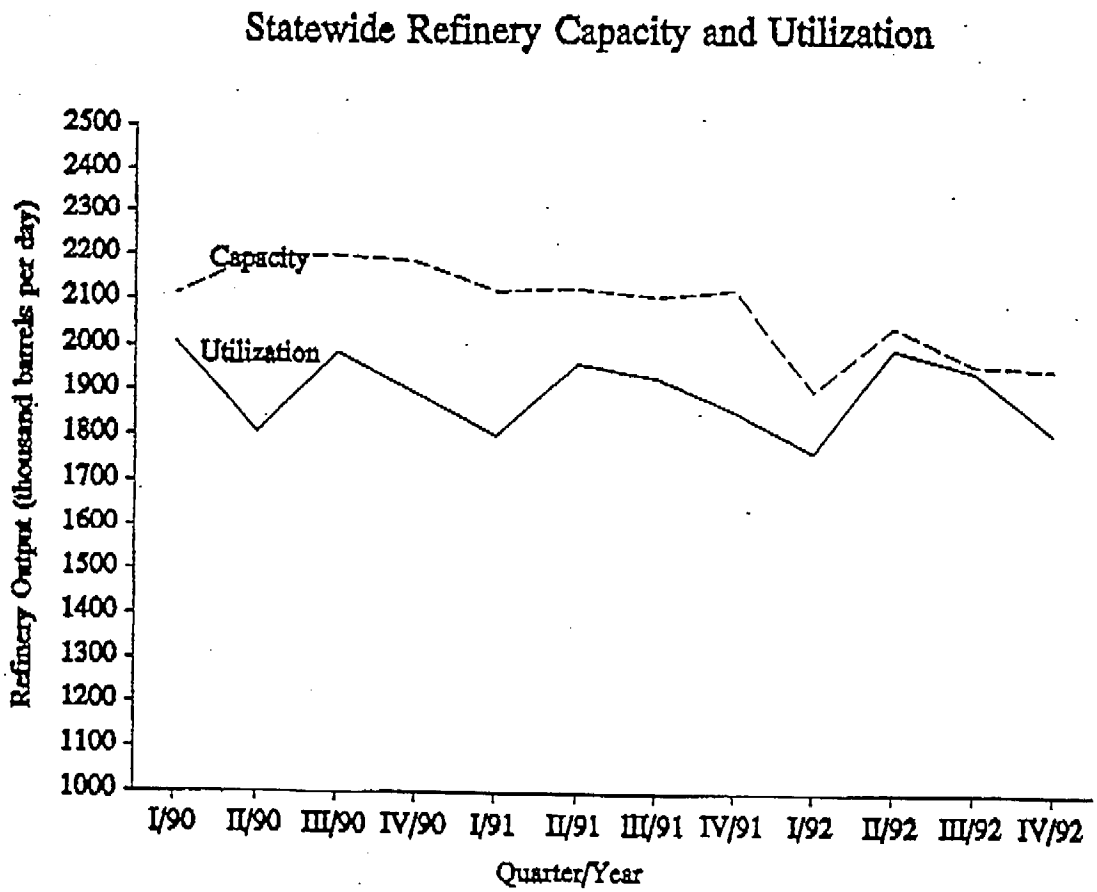

Figure 1: Refinery Capacity Utilization in California

It is likely that refinery capacity will continue to decrease. California has some of the strictest stationary source emissions control requirements in the nation and refiners in the state will have a difficult time meeting new regulations on air emissions and hazardous waste. A recent study by Wright Killen & Company predicts that new environmental

regulations for stationary sources under the Clean Air Act Amendments could eliminate up to 1.5 million barrel day (b/d) of refining capacity nationwide. Of this, 640,000 b/d is projected to be lost in PADD V, which is comprised largely of California[4]. *Oil & Gas Journal*'s 1993 Midyear Forecast mirrors this prediction of slipping refinery capacity with a projection that 1993 capacity will drop 1.3% from 1992 levels, following a first half drop of 1.9% from year-ago levels.[5]

In the face of declining California refining capacity, demand for gasoline is expected to rise. Given the continuing growth in California, CEC projections show gasoline demand in California increasing by 14.7% between 1991 and 2003, and 22% between 1991 and 2011, despite significant market penetration by alternative fuels[6]. These projections are for California demand alone; continuing population growth in Arizona, Nevada, and other states supplied by California refineries will add further to gasoline demand. As California is the primary supplier of motor fuel to these two neighboring states, it is not reasonable to expect that these exports could be curtailed to relieve pressure on gasoline demand.

The Oil & Gas Journal similarly predicts a 0.6% increase this year in the demand for motor gasoline as vehicle fleet and average vehicle miles travelled (VMT) increases outpace the slow, incremental increases in vehicle fuel efficiency.[7] As the motor vehicle population and VMT grow, demand for gasoline is likely to outstrip the statewide supply. These factors will further increase gasoline imports to California.

In the absence of any regulatory or economic obstacles, California refiners could simply build more refineries or expand the capacity of existing ones to keep pace with a rising fuel demand. However, because of regulatory burdens and uncertainties, it is questionable whether new oil refineries will be built in California. Even expanding an existing refinery requires a significant outlay of resources to satisfy permitting requirements. Thus, it appears that the forecast growth in gasoline demand in California and neighboring states will have to be met by importing gasoline from out-of-state refineries, either by tanker or (possibly) by pipeline from the Gulf Coast.

Given this situation, it seems clear that the effect of a marginal reduction in California gasoline demand due to increased market penetration by alternative fuels would be a reduction in gasoline imports or an increase in exports, rather than any change in crude oil production and refining in California. This would not affect the emissions of the refineries

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[4]"Wright Killen: clean air rules could wipe out 1.5 million b/d in U.S. refining capacity," *Oil & Gas Journal*, December 28, 1992, volume 90, number 52, p. 36.

[5]"Midyear Forecast/Review," *Oil & Gas Journal*, July 26, 1993, volume 91, number 30, pp. 49-70.

[6]California Energy Commission, *1991 Fuels Report Working Paper: California Energy Statistics*, December 1991.

[7]"Midyear Forecast/Review," op cit.

operating in California. Indeed, given the huge sunk costs of refining investment in California, and the continuing demand for diesel and other fuels, it is possible that many California refineries would continue to operate by exporting gasoline to other states even if gasoline demand in California dropped to zero.

A reduction in gasoline imports due to reduced demand would not result in lower refinery emissions but would lead to lower emissions from gasoline transportation, transshipment, and distribution, and these benefits are certainly worth quantifying. On the other hand, if methanol or ethanol were the replacement fuel, this reduction might be more than offset by the corresponding emissions from transportation, transshipment, and distribution of the alcohol fuel instead. Since nearly twice the volume of methanol or ethanol is required to give the same energy content as gasoline, total emissions from transportation and distribution of these fuels would likely be larger. Thus, rather than leading to a large reduction in fuel-cycle emissions, substitution of methanol or ethanol for gasoline in California is likely to increase total fuel-cycle emissions.

This simple example points up the importance of correct analysis of fuel supply and demand scenarios as the basis for analyzing fuel cycle emissions. Such analysis should always be conducted on a *marginal* basis - that is, addressing the effects of incremental changes in demand on emissions, rather than the average emissions from the fuel industry as a whole. Fuel-cycle emissions estimates based on average data can be grossly misleading, and policies based on such misleading estimates can worsen air quality.

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16 July 1994

Memorandum to: Stefan Unnasch, Acurex Environmental

From: G.P. Nowell, J.T. Nowell and Co.

In re: Oil Company analysis of full fuel cycle.

This memorandum is submitted as deliverable in partial fulfillment of your task order which will include brief analyses of WSPA and PG&E analysis.

The Appendix A document "Fuel-Cycle Emissions Benefits of Alternative Fuels: the Need to Consider Marginal Emissions," makes the following key points:

1) Decreased fuel efficiency of the alternative fuels will lead to increased emissions.
2) Petroleum fuel displacement by alternative fuels will first impact imports;
3) Or, refinery throughput will remain constant, but exports will increase;

1. The assertion is made that alternative fuels will increase emissions upstream due to the increased frequency of deliveries caused by lower energy content. The argument provides no quantification.

For methanol, the argument as presented is insufficient because fuel delivery is only a fraction of the total upstream emissions. M85 in light-duty use would increase upstream delivery-related emissions by 1.64, the increased volume that M85 vehicles would require. These upstream emissions would primarily be NOx from heavy-duty delivery vehicles. The increased volume of delivery vehicle-related NOx would have to be quantified against the VOC and NOx reductions associated with increased light (and possibly heavy) duty methanol (or CNG) fuel use. It is also possible that the delivery vehicle itself would be running on methanol, reducing its NOx output by about 63%.

Quantification of the fugitive emissions from the gasoline-related fraction of the M85 would be problematic and may point to the need to consider whether the emissions benefits are greater if the M85 is blended in the delivery vehicle or at the retail station. However, it should not be lost from view that M85 is usually seen as a transitional precursor to M100.

Benefits quantification should not focus exclusively on a static assumption about M85 replacement; that has never been the intention of methanol deployment strategy.

In the case of CNG, many of the quantification issues associated with methanol disappear because the pipeline delivery system eliminates the heavy-duty delivery truck.

2) Petroleum fuel displacement as it affects imports It is possible that imports will be the first to be displaced by alternative fuels. In that case, it would be reasonable to do a first-order quantification of imported methanol against imported gasoline. CNG would be measured against pipeline deliveries. However, it should be noted that the principle of alternative fuels is that they would constitute a growing, not a static, market. Hence the quantification against imported gasoline would at best show the benefits to be had at an early phase. Eventually the growth of the alternative fuel market would displace not only imports but sales from California refineries.

3) Petroleum fuel displacement as it may lead to increased exports.

First, even the most aggressive petroleum fuel displacement program will not be able to replace gasoline suddenly. A petroleum fuel displacement program would be doing well if it managed to prevent future growth--and hence the need to put in new refineries. But since existing refinery capacity is, according to the appendix, fully utilized, it is reasonable to ask what the upstream emissions characteristics of future petroleum use (as a result of demographic growth) will be. If there were a regulation in place limiting the state's future refinery capacity to existing throughput, then it would be reasonable to use, as a baseline, imported refined products to measure the benfits of alternative fuel use for the first few years. Otherwise the existing refinery/import mix should be used, on the assumption that the petroleum industry will continue to profit from the locational advantages of receiving crude at coastal delivery sites with a pipeline network that services a number of western states.

As conventional fuel demand increases in Nevada and Arizona increased alternative fuel use in California could prevent the need to expand refinery capacity in the state. This scenario assumes that market growth in Arizona and Nevada will equal or exceed the fuel displacement caused by alternative fuels. Other scenarios are possible, however. Under the assumption of rapid growth in alternative fuel use, refineries would have to seek additional "export" markets--either other states or perhaps internationally--to maintain profits. Under such conditions, however, the California refineries might begin to reach the limit of the effective radius under which they are competitive: other refineries more conveniently located near other markets may prevent an expansion of the market territory.

Second, an extremely successful alternative fuels market would eventually have the potential to force some refining operations out of business, the timing of this event being contingent upon major "lumpy" investment decisions about whether to shut down certain refining operations or to upgrade with more modern equipment. In a diminishing market, the latter

is unlikely. When the old refinery was shut down, there would be a "chunk" of the state market that would open up all at once, probably to a mixture of additional refined petroleum product imports and also to the hypothetical expanding alternative fuel market.

The emissions consequences of shutting down an old refinery would probably be quite favorable, particularly if a new one were not built to replace it because of alternative fuel use.

The conclusion of these scenarios is as follows. It would be unwise to expect an inventory impact that showed a simple one-to-one emissions reduction for every gallon of gasoline displaced. But it would be silly to maintain that the long-term introduction of alternative fuels will forseeably have zero or negative benefits. Rather, emission reduction benefits may come in lumps as facilities are shut down; or, they may come in the form of increased emissions which do not occur because the market expansion has been given to alternative fuels.

Third, it must be remembered that one of the functions of alternative fuels is to force the development of new technologies with even better emissions characteristics and hopefully more competitive prices and range. This goal is explicitly recognized in the technology-forcing ZEV mandate but it applies to the other alternative fuels as well. The quantification of full-cycle upstream emissions does not capture the potential gains of undiscovered technologies, but it does have the merit of identifying the maximum achievable benefits to be had from displacing petroleum use.

In all cases, the quantification of total fuel cycle emissions on a grams-per-gallon basis is a worthwhile unit of measure capable of indicating the overall direction of air quality control efforts, and also capable of indicating whether future control efforts ought to be directed more towards the automobile or towards upstream activities. In addition, total fuel cycle analysis aids in the identification of production and distribution-related emissions which may contain other kinds of air toxics such as benzene.

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Date: 17 July 1994
To: Stefan Unnasch, Acurex Environmental
From: Greg Nowell, J.T. Nowell and Company

Subject: Review of "Emission Benefits of Electric Vehicles in the Pacific Gas and Electric Territory."

This review is the second part of your requested deliverable. A review of the WSPA testimony remains.

The document in question contains expert testimony covering the territories of Pacific Gas and Electric, Sacramento Metropolitan Utility District, San Diego Gas and Electric, and Southern California Edison. There are four completely separate analyses of the impact of ZEV deployment based on EMFAC/BURDEN runs. Total NOx, ROG, and other emissions benefits are calculated for each territory. Since the EMFAC/BURDEN traffic pattern inputs vary somewhat for each area, and since the power mix that will recharge the ZEVs is different in each area, there is variability in the emissions benefits for each region. The emissions benefits are calculated using a partial "fuel cycle analysis." That is, ZEVs are assumed to have some emissions from their power generation; the comparison is made against the refining and marketing (but not production) of petroleum fuels for conventional vehicles. Vehicle emissions include tailpipe as well as hot soak, diurnal, and running losses; EMFAC/BURDEN was modified to include these.

Key assumptions, and brief analysis, are as follows:

1. ZEVS replace new vehicles. This means that their emissions reductions are measured against the lowest possible gasoline vehicle emissions. An alternative would be to measure the ZEVs against "the average in-use vehicle." However, it is plausible to evaluate a new car against a new car.

2. ZEV VMT is assumed to be equivalent to conventional vehicle VMT. This is probably not a plausible assumption and was attacked in the WSPA testimony. This is a complicated issue and will be discussed in the third memorandum.

3. EV recharging efficiency assumptions ranged from 0.26 to 0.84 kWh/mi. These are conservative assumptions which bias against EVs. Current EVs on the market recharge at 0.35 to 0.45 kWh/mi (LDAs) to 0.5 to 1.0 kWh/mi (vans). By choosing ranges close to

existing technology, the forecasts probably understate future improvements. Forecasts of future LDA recharging range from 0.075 kWh/mi to 0.14 kWh/mi.

4. All recharging was assumed to occur during off-peak hours. This is probably unrealistic, and biases the emissions profiles in favor of EVs.

5. EVs were assumed to penetrate into medium duty. This was done by shifting some of the pro-rated LD pickup ZEVs into the medium duty category. This would enhance the emissions benefit shown by ZEVs because medium duty emissions are higher and fuel economy worse; the lower fuel economy would proportionately increase attributed upstream emissions. It is, however, realistic to assume some medium-duty ZEVs for light freight and delivery purposes. In heavy traffic conditions medium-duty ZEVs would be more efficient than G100 vehicles, because there would be no power lost to keeping the engine running in idle.

6. Upstream marketing emissions included: vapor displacement, spillage, delivery, and underground breathing losses. While ZEVs would reduce the frequency of spillage, vapor displacement, and delivery, the underground tank breathing losses would probably be constant from a ZEV to a non-ZEV scenario. The surface area causing evaporation in the underground tank would be constant regardless of the rate of fuel use. The only way the breathing losses would be reduced is if, for example, 2% ZEV deployment shut down 2% of all gasoline stations, rather than reducing business at all stations by 2%. The reduction of gasoline stations would probably be a long-term, not a short-term, consequence of ZEV vehicle use.

Some thinking needs to be done between "real displacement" and what happens to measurement indices of upstream emissions. The breathing losses, if held constant rather than assumed displaced by alternative fuels, would be factored onto a smaller quantity of gallons of gasoline. Thus the grams-per-gallon of gasoline would go up. Therefore, if we do not assume the real displacement of some upstream operations, what is taken away from the benefit of the alternative fuel shows up as an increment in the g/gal of the conventional fuel. There are probably other aspects of upstream emissions which also remain constant in this manner. The relative merit of the alternative fuel increases as gasoline use declines.

7. Refining and marketing losses are not broken down as thoroughly as, for example, the GRI report. Thus certain assumptions, such as the emissions level of the vehicle carrying gasoline from the refinery to the gasoline station, cannot be examined. The exclusion of production ROG biases the case against EVs, particularly in the South Coast, where oil is produced; in any case if the out-of-state power mix is factored on to EV NOx then the full production ROG from oil production should be assumed. Refinery ROG is assumed to be distributed proportionately across the spectrum of refinery products.

8. Refining is assumed to be "in the territory" under examination. Sacramento vehicles are assumed to have a "refining g/mi" even though there is no refining in Sacramento. Similarly,

San Diego has a "refining g/mi." On the other hand, both the South Coast and Bay Areas have ROG factored only in proportion to use, with no calculation for the extra benefit that would accrue if, for example, San Diego ZEVs reduced displaced petroleum refining in the South Coast. This is a metaphysical attribution issue which, like out-of-state NOx and petroleum production ROG, has no fully satisfactory resolution.

9. No discussion was made of Calif. Phase II gasoline. The WSPA testimony criticizes the report for this omission; it is possible that reformulated was not included.

10. ZEV deployment is set to CEC estimation parameters. I have not included many of the actual emissions numbers because the reports set them out fairly clearly. Since the reports are identical in format, finding what you want in one points you to the desired data in all.

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Date: 18 July 1994
To: Stefan Unnasch, Acurex Environmental
From: Greg Nowell, J.T. Nowell and Company

Subject: Review of WSPA testimony.

This review is the third and final part of your requested deliverable.

The document in question examines the expert testimony of the LEV Emission Vehicle program applications of Pacific Gas and Electric, Sacramento Metropolitan Utility District, San Diego Gas and Electric, and Southern California Edison. Not all the analysis is discussed in this deliverable as the WSPA testimony touches on a wide range of topics, for example, energy security.

The principal emissions-related testimony comes from James M. Lyons.

The Lyons testimony challenges the utilities on a number of grounds: A) use of the previous EMFAC model rather than EMFAC7F; B) failure to include reformulated gasoline in upstream emissions analysis; C) inadequate quantification of upstream emissions displacement; D) inappropriate assumptions about ZEV VMT; E) incorrectly estimating upstream NOx production of utilities.

A and B. There is no question that the utility documents would have been better if they had employed the most recent version of EMFAC and included reformulated gasoline. Nonetheless the effect of the new model does not overwhelmingly confute the utility position. More importantly, a major objective of a future EMFAC revision is to include so-called off-cycle emissions, e.g., emissions that occur when driving practices deviate from the FTP pattern. Off-cycle emissions quantification is likely to increase substantially the vehicle contribution to the inventory, making, perhaps, the older EMFAC values closer to the truth than the current EMFAC.

C. The objections to the quantification of upstream emissions are fundamentally similar to the Appendix A objections which were addressed in the 16 July memorandum.

D. The testimony criticizes the assumption made by the utilities that ZEV VMT will replace G100 VMT on a 1:1 basis, and proposed a ZEV:G100 ratio of 0.788:1. The argument is that the ZEV benefit will be lower than quantified by the utilities because the

fleet of G100 vehicles will be used more. If this is true, it would seem, judging from the thrust of the WSPA testimony, that most of the increased use would come from the vehicles in use. WSPA argues all new car prices will rise as a result of the ZEV rule; fewer new cars will be sold, the older cars will last longer, and be used more intensively.

It is quite possible however that the effects of this will not be all negative. In particular, diurnal soak emissions, and the virtually uncontrolled emissions that occur after canister saturation during a multi-day diurnal, would go down as a result of increased use of the G100 fleet. The increased use of the G100 vehicles relative to the ZEVs may be for recreational purposes which take vehicles out of the basin (profiting from their range characteristics). Also, if fewer vehicles are starting up to make the same number of postulated trips and cover the same VMT, the period between each individual vehicle's startups may decrease. In theory this should reduce the number of cold-starts as a percentage of total VMT. Therefore, the WSPA argument, even if its premises are true, does not necessarily lead to the quantitative results posited by Lyons. More intensive use of existing G100 vehicles may have a favorable emissions impact. In any case the issue cannot be resolved on the basis of WSPA's a priori argument.

E. The testimony takes the petitioning utilities to task for inadequately quantifying their own emissions. Two basic arguments are made: 1) the utilities have made an unreasonably favorable assumption about their EV fuel mix; 2) the utilities have made unrealistic assumptions about the peak (4.5%) vs. off-peak (95.5%) recharging; 3) utilities have not realistically represented the control requirements to which they will be subject, which impacts the projected emissions.

E.1. The utilities have tended to forecast natural gas fuel in quantifying EV benefits. Lyons contends that this is unacceptable because fuel prices and the way in which marginal demand is met in peak periods helps determine what sources are drawn upon for power. Thus, coal-fired plants may be used in some scenarios, and San Diego Gas and Electric may occasionally be tempted by low fuel oil prices to use fuel oil rather than natural gas.

It is difficult to see what WSPA gains by raising this issue. It is clear from its own testimony that the non-natural gas fuel mixes will, for the most part, come from out of basin sources. If these emissions are taken into account, fairness would require that gasoline ROG calculations include the entire production and transportation emissions, including, for example, many thousands of miles of supertanker NOx. If, on the other hand, WSPA does not want to include out-of-basin sources, than the extent to which these emissions are excluded is the extent to which EVs are made even cleaner relative to G100 vehicles.

E.2 Peak vs. off-peak recharging. WSPA is certainly correct in assuming that some peak and mid-peak recharging will occur. The extent to which it occurs will probably be heavily influenced by the extent to which peak hour vehicle recharging is made "punitive."

However, it should be noted that in a developing EV market infrastructure will, over time,

be no more static in the long run than gasoline infrastructure has proved to be. Flywheel power storage in downtown areas might allow for the transfer of electrical power from off-peak to peak times, and permit the customer convenience of charging during peak times at lower rates. Stationary flywheels present many fewer technical problems than flywheels mounted in vehicles. Predicting that EV vehicle recharging technology will remain in the crudely forecast pattern of a socket with a meter is akin to predicting in 1900 that gasoline vehicles would never work because the tin can industry could never keep up with the need for 5-gallon drums, the preferred distribution method at that time.

E.3. So Cal Edison is criticized for assuming that SCR controls, which it may not implement under RECLAIM, will be in place because that was the assumed control strategy before Edison joined RECLAIM.

This is a silly argument because RECLAIM will force standards down overall, although there may be an increase under initial allowances (a peculiarity of RECLAIM). If Edison buys NOx credits, the in-basin NOx effect will be the same or less as under the implementation of controls. Certified credits include "rule compliance" assumptions which are conservatively biased--20% downward--to protect air quality. That is, if one ton of reduction is generated, only 0.8 tons is certified for actual sale. Presumably this "rule compliance" feature of federal law is still in effect even under RECLAIM. The real reduction will be in excess of the purchased reduction. This is also the case in non-RECLAIM credit transactions, which, on top of "rule compliance" protection, include requirements for "clean the air" trade ratios which typically range from 1.25 to 1.5. That is, of a 1-ton reduction, only 0.8 tons are certified for sale. But the buyer who wants to offset one ton of pollutant must buy 1.25 tons. In effect he must buy 1.25 x 1.25 or 1.56 tons of reductions in order to be permitted to pollute one ton.

Even if the initial allowances under RECLAIM are generous, it is still the case that the system is pointed, directionally, to forcing either extremely low reductions at the source or to forcing the purchase of equivalent reduction credits. Either way, the secular effect will not be to raise emissions levels higher than the utilities have projected (at least insofar as powerplant emissions are concerned).

This ends the emissions-related part of this analysis. Two points should be made, in closing, about the general tenor of the WSPA testimony. The first is that the WSPA testimony consistently assumes that the emissions benefit claimed by the utilities can only be "surplus" to what would occur under the vehicle deployment foreseen under the ZEV-LEV rules. But the success of these rules are in part dependent on the help of other agencies. The "fuel distribution mandate" was abandoned by ARB only after intense pressure from the Governor Deukmejian's office. As a result there are no specific provisions for the creation of fueling infrastructure: not out of blind faith that the market will provide such infrastructure, but because of political, not technical, requirements. ARB's move to a "standard oriented" system retained, in spite of the decision to abandon the fuel distribution mandate, the ZEV rule, which is a direct outgrowth of South Coast Tier III requirements

and is explicitly aimed at forcing technology into new paths. In this sense, the direct quantification of benefits for early ZEVs is unwarranted. The intention is to forge into a new generation of technology. As written both South Coat Tier III and the ARB ZEV-LEV rule are direct invitations to the people and regulatory agencies of California to aid in what is recognizably a difficult task of investing in new fuel infrastructure. The utility petitions are consistent with the objective of introducing a new generation of technology.

The second point concerns the oil industry's repeated assertions that the economic effect of ratebasing will be "anticompetitive." It is highly curious that the sum total of the oil industry's analysis on this score amounts to this: those players who potentially have the resources to enter the transportation fuel market on a significant scale should be excluded from doing so. It would not be difficult to see this assertion as self-serving.