tive (+) or negative (−) sign.

Currently, steam coal as raw material in the energy transformation sector is used only for auto-generation in coal mines (TSCO&AUT). In the future, however, it is possible that steam coal will be used in thermal power generation (TSCO&PUB) and in town gas plant (TSCO&TWG) which is now under construction. It is also possible that briquet manufacturing industry will begin. Considering these future possibilities, the equations in the energy transformation sector are expressed as follows:

Transformation to Electricity in Public Utility
EBC03R11 = −TSCO&PUB*FSCO

Transformation to Electricity in Auto-Generation
EBC03R13 = −TSCO&AUT*FSCO

Transformation to Town Gas
EBC03R14 = −TSCO&TWG*FSCO

Transformation to Briquet
EBC03R16 = −TSCO&BRQ*FSCO

Total of Energy Transformation Sector
EBC03R17 = EBC03R11 + EBC03R13 + EBC03R14 + EBC03R16

In the energy transformation sector, the negative (−) sign means input of primary energy as raw material and the positive (+) sign means output of manufactured energy (= secondary energy).

In the energy industry own-use sector, there is own-use in coal mine (HSCO&CMN) only. We added losses (LSCO) in this sector accepting the Indonesian counterparts' strong argument that there exist original statistics. Problems about losses will be discussed in detail later with statistical difference. Equations in the energy industry own-use sector are expressed as follows:

Own Use in Coal Mine
EBC03R27 = −HSCO&CMN*FSCO

Losses
EBC03R28 = −LSCO*FSCO

Total of Energy Industry Own Use Sector
EBC03R29 = EBC03R27 + EBC03R28

In the final consumption sector, steam coal is currently used in ceramics and cements (CSCO&CAC), small wares and others (CSCO&SWO), and railways (CSCO&RLW), while, in the future, steam coal may be used in mining (CSCO&MIN). Thus equations of this sector are constructed as follows:

Final Energy Consumption in Ceramics and Cements
EBC03R44 = CSCO&CAC*FSCO

Final Energy Consumption in Small Wares and Others
EBC03R48 = CSCO&SWO*FSCO

Total of Final Energy Consumption in Manufacturing
EBC03R38 = EBC03R44 + EBC03R48

Final Energy Consumption in Mining
EBC03R36 = CSCO&MIN*FSCO

Total of Final Energy Consumption in Industry Sector
EBC03R33 = EBC03R36 + EBC03R38

Final Energy Consumption in Railways
EBC03R55 = CSCO&RLW*FSCO

Total of Final Energy Consumption in Transportation Sector
EBC03R52 = EBC03R55

Total of final energy consumption is the sum total of totals of industry sector, residential and commercial sector, transportation sector and other sectors (government, forces, etc.). However, since steam coal is not used in residential and commercial sector and other sectors, total of final energy consumption is reduced to the following equation:

Total of Final Energy Consumption
EBC03R32 = EBC03R33 + EBC03R52

The final consumption is then, obtained by adding raw material consumption in chemical industry and non-energy consumption to the final consumption explained above. However, as steam coal is not used in the later two kinds of consumption, the final consumption of steam coal is expressed as follows:

Final Consumption
EBC03R33 = EBC03R32

Finally, statistical difference is found out by subtracting totals of primary energy supply sector, energy transformation sector and energy industry own-use sector from the final consumption.

Statistical Difference
EBC03R30 = EBC03R31–EBC03R06–EBC03R17–EBC03R29

It is usually not easy to separate statistical differences from losses. Statistical differences result from differences in the data collection methods employed by, for example, the producer and the distributer. On the other hand, losses occur as results of evaporation, leakage, etc. at various points of the entire flow. Since there is no original statistics of losses as

such, they are usually calculated as the differences between statistics at two different points of the flow, e.g. before transportation and after.

Therefore, separation of the two should be done according to cases. For example, in the case of electric power, the difference should be counted as loss, because transportation and distribution losses are far greater than statistical difference. It also should be counted as loss in the case of natural gas, with which flaring is a common practice. Excepting these two sources of energy, it seems reasonable to count such differences as statistical differences, rather than as losses.

In the manner explained above as to the case of steam coal, energy balance equations are first made columnwise as to the other categories of energy.

The next set of equations are those of subtotals, such as total coal, total petroleum products, etc. Here again we explain by taking coal in the primary energy supply sector as an example.

Since four categories of coals, coaking coal, steam coal, anthracite and lignite, are produced domestically, domestic production in total coal is given as follows:

Domestic Production
EBC01R01 = EBC03R01 + EBC04R01 + EBC05R01

Likewise, import, export and stock change are given as follows:

Import
EBC01R02 = EBC02R02

Export
EBC01R03 = EBC03R03 + EBC04R03

Stock Change
EBC01R05 = EBC02R05 + EBC03R05 + EBC04R05 + EBC05R05

Thus total of coal in the primary energy supply sector is expressed in two different equations as follows:

Total of Primary Energy Supply Sector
EBC01R06 = EBC02R06 + EBC03R06 + EBC04R06 + EBC05R06, and
EBC01R06 = EBC01R01 + EBC01R02 + EBC01R03 + EBC01R05

Each of subtotals is given as explained above, and by aggregating them all the grand total is given.

It is to be noted here that the figures shown in the energy transformation sector of grand total column show losses occurring in the process of transforming primary energy into processed (= secondary) energy.

2. List of Energy Balance Equations

(1) Coking Coal

```
EBCO2R02=ICCO*FCCO
EBCO2R05=(WCCO(-1)-WCCO)*FCCO
EBCO2R06=EBCO2R02+EBCO2R05
EBCO2R14=-ICCO&TWG*FCCO
EBCO2R15=-ICCO&COK*FCCO
EBCO2R17=EBCO2R14+EBCO2R15
EBCO2R28=-LCCO*FCCO
EBCO2R29=EBCO2R28
EBCO2R30=-EBCO2R06-EBCO2R17-EBCO2R29
```

(2) Steam Coal

```
EBCO3R01=PSCO*FSCO
EBCO3R03=-ESCO*FSCO
EBCO3R05=(WSCO(-1)-WSCO)*FSCO
EBCO3R06=EBCO3R01+EBCO3R03+EBCO3R05
EBCO3R11=-ISCO&PUB*FSCO
EBCO3R13=-ISCO&AUT*FSCO
EBCO3R14=-ISCO&TWG*FSCO
EBCO3R16=-ISCO&BRO*FSCO
EBCO3R17=EBCO3R11+EBCO3R13+EBCO3R14+EBCO3R16
EBCO3R27=-HSCO&CMN*FSCO
EBCO3R28=-LSCO*FSCO
EBCO3R29=EBCO3R27+EBCO3R28
EBCO3R44=CSCO&CAC*FSCO
EBCO3R48=CSCO&SWD*FSCO
EBCO3R38=EBCO3R44+EBCO3R48
EBCO3R36=CSCO&MIN*FSCO
EBCO3R33=EBCO3R36+EBCO3R38
EBCO3R55=CSCO&RLW*FSCO
EBCO3R52=EBCO3R55
EBCO3R32=EBCO3R33+EBCO3R52
EBCO3R31=EBCO3R32
EBCO3R30=EBCO3R31-EBCO3R06-EBCO3R17-EBCO3R29
```

(3) Anthracite

```
EBCO4R01=PACO*FACO
EBCO4R03=-EACO*FACO
EBCO4R05=(WACO(-1)-WACO)*FACO
EBCO4R06=EBCO4R01+EBCO4R03+EBCO4R05
EBCO4R27=-HACO&CMN*FACO
EBCO4R28=-LACO*FACO
EBCO4R29=EBCO4R27+EBCO4R28
EBCO4R46=CACO&NFM*FACO
EBCO4R38=EBCO4R46
EBCO4R36=CACO&MIN*FACO
EBCO4R33=EBCO4R36+EBCO4R38
EBCO4R32=EBCO4R33
EBCO4R60=CACO&NEN*FACO
EBCO4R31=EBCO4R32+EBCO4R60
EBCO4R30=EBCO4R31-EBCO4R06-EBCO4R29
```

(4) Lignite

```
EBCO5R01=PLCO*FLCO
EBCO5R05=(WLCO(-1)-WLCO)*FLCO
EBCO5R06=EBCO5R01+EBCO5R05
EBCO5R28=-LLCO*FLCO
EBCO5R29=EBCO5R28
EBCO5R44=CLCO&CAC*FLCO
EBCO5R38=EBCO5R44
EBCO5R33=EBCO5R38
EBCO5R32=EBCO5R33
EBCO5R31=EBCO5R32
EBCO5R30=EBCO5R31-EBCO5R06-EBCO5R29
```

(5) Total of Coal

```
EBCO1R01=EBCO3R01+EBCO4R01+EBCO5R01
EBCO1R02=EBCO2R02
EBCO1R03=EBCO3R03+EBCO4R03
EBCO1R05=EBCO2R05+EBCO3R05+EBCO4R05+EBCO5R05
EBCO1R06=EBCO2R06+EBCO3R06+EBCO4R06+EBCO5R06
EBCO1R11=EBCO3R11
EBCO1R13=EBCO3R13
EBCO1R14=EBCO2R14+EBCO3R14
EBCO1R15=EBCO2R15
EBCO1R16=EBCO3R16
EBCO1R17=EBCO2R17+EBCO3R17
EBCO1R27=EBCO3R27+EBCO4R27
EBCO1R28=EBCO2R28+EBCO3R28+EBCO4R28+EBCO5R28
EBCO1R29=EBCO2R29+EBCO3R29+EBCO4R29+EBCO5R29
EBCO1R30=EBCO2R30+EBCO3R30+EBCO4R30+EBCO5R30
EBCO1R31=EBCO3R31+EBCO4R31+EBCO5R31
EBCO1R32=EBCO3R32+EBCO4R32+EBCO5R32
EBCO1R33=EBCO3R33+EBCO4R33+EBCO5R33
EBCO1R36=EBCO3R36+EBCO4R36
EBCO1R38=EBCO3R38+EBCO4R38+EBCO5R38
EBCO1R44=EBCO3R44+EBCO5R44
EBCO1R46=EBCO4R46
EBCO1R48=EBCO3R48
EBCO1R52=EBCO3R52
EBCO1R55=EBCO3R55
EBCO1R60=EBCO4R60
```

(6) Original Crude Oil

```
EBCO7R01=POCR*FOCR
EBCO7R02=IOCR*FOCR
EBCO7R03=-EOCR*FOCR
EBCO7R05=(WOCR(-1)-WOCR)*FOCR
EBCO7R06=EBCO7R01+EBCO7R02+EBCO7R03+EBCO7R05
EBCO7R07=-IOCR&REF*FOCR
EBCO7R17=EBCO7R07
EBCO7R18=-HOCR&CRF*FOCR
EBCO7R20=-HOCR&REF*FOCR
```

```
EBC07R28=-(LOCR$CRF+LOCR$VRF)*FOCR
EBC07R29=EBC07R18+EBC07R20+EBC07R28
EBC07R30=-EBC07R06-EBC07R17-EBC07R29
```

(7) Reduced Crude Oil

```
EBC08R02=IABS*FABS+ILBS*FLBS
EBC08R05=(VABS(-1)-VABS)*FABS+
                    (VLBS(-1)-VLBS)*FLBS
EBC08R06=EBC08R02+EBC08R05
EBC08R07=-TABS$REF*FABS-TLBS$REF*FLBS
EBC08R17=EBC08R07
EBC08R28=-LABS*FABS-LLBS*FLBS
EBC08R29=EBC08R28
EBC08R30=-EBC08R06-EBC08R17-EBC08R29
```

(8) Total of Crude Oil

```
EBC06R01=EBC07R01
EBC06R02=EBC07R02+EBC08R02
EBC06R03=EBC07R03
EBC06R05=EBC07R05+EBC08R05
EBC06R06=EBC07R06+EBC08R06
EBC06R07=EBC07R07+EBC08R07
EBC06R17=EBC07R17+EBC08R17
EBC06R18=EBC07R18
EBC06R20=EBC07R20
EBC06R28=EBC07R28+EBC08R28
EBC06R29=EBC07R29+EBC08R29
EBC06R30=EBC07R30+EBC08R30
```

(9) Aviation Gasoline

```
EBC12R02=IAGS*FAGS
EBC12R03=-EAGS*FAGS
EBC12R04=-CAGS$IUL*FAGS
EBC12R05=(WAGS(-1)-WAGS)*FAGS
EBC12R06=EBC12R02+EBC12R03+EBC12R05
EBC12R07=PAGS$REF*FAGS
EBC12R17=EBC12R07
EBC12R28=-LAGS*FAGS
EBC12R29=EBC12R28
CAGS$TIN=CAGS$AGR+CAGS$FRT+CAGS$MIN+
      CAGS$MAC+CAGS$SVO+HAGS$CRF+HAGS$REF;
         +CAGS$CON
EBC12R53=(CAGS$AIR+CAGS$TIN)*FAGS
EBC12R57=CAGS$IUL*FAGS
EBC12R52=EBC12R53+EBC12R57
EBC12R58=CAGS$GAF*FAGS
EBC12R32=EBC12R52+EBC12R58
EBC12R31=EBC12R32
EBC12R30=EBC12R31-EBC12R06-EBC12R17-EBC12R29
```

(10) Super Gasoline

```
EBC13R02=ISGS*FSGS
EBC13R05=(WSGS(-1)-WSGS)*FSGS
EBC13R06=EBC13R02+EBC13R05
EBC13R07=PSGS$REF*FSGS
EBC13R17=EBC13R07
EBC13R28=-LSGS*FSGS
EBC13R29=EBC13R28
CSGS$TIN=CSGS$MIN+CSGS$FOD+CSGS$MAC+CSGS$FCH
            +CSGS$SVO+HSGS$REF+HSGS$CRF;
         +CSGS$CON
EBC13R54=(CSGS$TIN+CSGS$ROD)*FSGS
EBC13R52=EBC13R54
EBC13R58=CSGS$GAF*FSGS
EBC13R32=EBC13R52+EBC13R58
EBC13R31=EBC13R32
EBC13R30=EBC13R31-EBC13R06-EBC13R17-EBC13R29
```

(11) Premium Gasoline

```
EBC14R02=IPGS*FPGS
EBC14R03=-EPGS*FPGS
EBC14R05=(WPGS(-1)-WPGS)*FPGS
EBC14R06=EBC14R02+EBC14R03+EBC14R05
EBC14R07=PPGS$REF*FPGS
EBC14R17=EBC14R07
EBC14R28=-LPGS*FPGS
EBC14R29=EBC14R28
CPGS$TIN=CPGS$AGR+CPGS$FRT+CPGS$MIN+CPGS$CON
            +CPGS$FOD+CPGS$TXT+CPGS$RUB;
      +CPGS$PAP+CPGS$FCH+CPGS$CAC+CPGS$NFA
      +CPGS$MAC+CPGS$SVO+HPGS$CRF;
         +HPGS$REF+HPGS$PUB+CPGS$TAS
EBC14R54=(CPGS$ROD+CPGS$TIN)*FPGS
EBC14R56=CPGS$NAV*FPGS
EBC14R52=EBC14R54+EBC14R56
EBC14R58=CPGS$GAF*FPGS
EBC14R32=EBC14R52+EBC14R58
EBC14R31=EBC14R32
EBC14R30=EBC14R31-EBC14R06-EBC14R17-EBC14R29
```

(12) Total of Gasoline

```
EBC11R02=EBC12R02+EBC13R02+EBC14R02
EBC11R03=EBC12R03+EBC14R03
EBC11R04=EBC12R04
EBC11R05=EBC12R05+EBC13R05+EBC14R05
EBC11R06=EBC12R06+EBC13R06+EBC14R06
EBC11R07=EBC12R07+EBC13R07+EBC14R07
EBC11R17=EBC12R17+EBC13R17+EBC14R17
EBC11R28=EBC12R28+EBC13R28+EBC14R28
EBC11R29=EBC12R29+EBC13R29+EBC14R29
EBC11R30=EBC12R30+EBC13R30+EBC14R30
EBC11R31=EBC12R31+EBC13R31+EBC14R31
EBC11R32=EBC12R32+EBC13R32+EBC14R32
```

```
EBC11R52=EBC12R52+EBC13R52+EBC14R52
EBC11R53=EBC12R53
EBC11R54=EBC13R54+EBC14R54
EBC11R56=EBC14R56
EBC11R57=EBC12R57
EBC11R58=EBC12R58+EBC13R58+EBC14R58
```

(13) Jet Fuel

```
EBC15R02=IJET*FJET
EBC15R03=-EJET*FJET
EBC15R04=-CJET&IUL*FJET
EBC15R05=(WJET(-1)-WJET)*FJET
EBC15R06=EBC15R02+EBC15R03+EBC15R05
EBC15R07=PJET&REF*FJET
EBC15R17=EBC15R07
EBC15R28=-LJET*FJET
EBC15R29=EBC15R28
CJET&TIN=CJET&AGR+CJET&FRT+CJET&MIN+
      CJET&CON+CJET&SVO+HJET&CRF+HJET&REF;
        +CJET&FOD
EBC15R53=(CJET&TIN+CJET&AIR)*FJET
EBC15R57=CJET&IUL*FJET
EBC15R52=EBC15R53+EBC15R57
EBC15R58=CJET&GAF*FJET
EBC15R32=EBC15R52+EBC15R58
EBC15R31=EBC15R32
EBC15R30=EBC15R31-EBC15R06-EBC15R17-EBC15R29
```

(14) Kerosene

```
EBC16R02=IKER*FKER
EBC16R05=(WKER(-1)-WKER)*FKER
EBC16R06=EBC16R02+EBC16R05
EBC16R07=PKER&REF*FKER
EBC16R14=-IKER&IWG*FKER
EBC16R17=EBC16R07+EBC16R14
EBC16R28=-LKER*FKER
EBC16R29=EBC16R28
CKER&TIN=CKER&MIN+CKER&SVO+CKER&GAF+
            HKER&CRF+HKER&REF+HKER&IWG
EBC16R49=(CKER&RAC+CKER&TIN)*FKER
EBC16R32=EBC16R49
EBC16R31=EBC16R32
EBC16R30=EBC16R31-EBC16R06-EBC16R17-EBC16R29
```

(15) Automotive Diesel Oil

```
EBC18R02=IADO*FADO
EBC18R03=-EADO*FADO
EBC18R04=-CADO&IUL*FADO
EBC18R05=(WADO(-1)-WADO)*FADO
EBC18R06=EBC18R02+EBC18R03+EBC18R05
EBC18R07=PADO&REF*FADO
EBC18R11=-IADO&FUB*FADO
IADO&AUT=AADO&AGR+AADO&MIN+AADO&CON+AADO
&FOD+AADO&TXT+AADO&RUB+AADO&PAP;
+AADO&FCH+AADO&CAC+AADO&IAS+AADO
&NFK+AADO&MAC+AADO&SVO+AADO&RAC;
+AADO&GAF+AADO&FRT+AADO&CKF
+AADO&REF+AADO&FUB+AADO&IWG
EBC18R13=-IADO&AUT*FADO
EBC18R14=-IADO&IWG*FADO
EBC18R17=EBC18R07+EBC18R11+EBC18R13+EBC18R14
EBC18R18=-HADO&CRF*FADO
EBC18R20=-HADO&REF*FADO
EBC18R23=-HADO&FUB*FADO
EBC18R24=-HADO&IWG*FADO
EBC18R28=-LADO*FADO
EBC18R29=EBC18R18+EBC18R20+EBC18R23+EBC18R24
                                    +EBC18R28
EBC18R39=CADO&FOD*FADO
EBC18R40=CADO&TXT*FADO
EBC18R41=CADO&RUB*FADO
EBC18R42=CADO&PAP*FADO
EBC18R43=CADO&FCH*FADO
EBC18R44=CADO&CAC*FADO
EBC18R45=CADO&IAS*FADO
EBC18R46=CADO&NFK*FADO
EBC18R47=CADO&MAC*FADO
EBC18R48=CADO&SVO*FADO
EBC18R38=EBC18R39+EBC18R40+EBC18R41+EBC18R42
          +EBC18R43+EBC18R44+EBC18R45;
      +EBC18R46+EBC18R47+EBC18R48
EBC18R34=(CADO&AGR+CADO&FRT)*FADO
EBC18R35=CADO&FIS*FADO
EBC18R36=CADO&MIN*FADO
EBC18R37=CADO&CON*FADO
EBC18R33=EBC18R34+EBC18R36+EBC18R37+EBC18R35
                                    +EBC18R38
EBC18R53=CADO&AIR*FADO
EBC18R54=CADO&ROD*FADO
EBC18R55=CADO&RLV*FADO
EBC18R56=CADO&NAV*FADO
EBC18R57=CADO&IUL*FADO
EBC18R52=EBC18R53+EBC18R54+EBC18R55+EBC18R56
                                    +EBC18R57
EBC18R58=CADO&GAF*FADO
EBC18R61=EBC18R43
EBC18R32=EBC18R33+EBC18R52+EBC18R58
EBC18R31=EBC18R32
EBC18R30=EBC18R31-EBC18R06-EBC18R17-EBC18R29
```

(16) Industrial Diesel Oil

```
EBC19R02=IIDO*FIDO
EBC19R03=-EIDO*FIDO
EBC19R04=-CIDO&IUL*FIDO
EBC19R05=(WIDO(-1)-WIDO)*FIDO
EBC19R06=EBC19R02+EBC19R03+EBC19R05
EBC19R07=PIDO&REF*FIDO
```

(8)

```
EBC19R11=-TIDO&PUB*FIDO
TIDO&AUT=AIDO&AGR+AIDO&MIN+AIDO&CON+AIDO&FOD+AIDO&TXT+AIDO&RUB+AIDO&PAP;
        +AIDO&FCH+AIDO&CAC+AIDO&IAS+AIDO&NFM+AIDO&MAC+AIDO&SVO+AIDO&RAC;
        +AIDO&GAF+AIDO&FRT+AIDO&CRF+AIDO&REF+AIDO&PUB+AIDO&TVG
EBC19R13=-TIDO&AUT*FIDO
EBC19R14=-TIDO&TVG*FIDO
EBC19R17=EBC19R07+EBC19R11+EBC19R13+EBC19R14
EBC19R18=-HIDO&CRF*FIDO
EBC19R20=-HIDO&REF*FIDO
EBC19R23=-HIDO&PUB*FIDO
EBC19R24=-HIDO&TVG*FIDO
EBC19R28=-LIDO*FIDO
EBC19R29=EBC19R18+EBC19R20+EBC19R23+EBC19R24+EBC19R28
EBC19R39=CIDO&FOD*FIDO
EBC19R40=CIDO&TXT*FIDO
EBC19R41=CIDO&RUB*FIDO
EBC19R42=CIDO&PAP*FIDO
EBC19R43=CIDO&FCH*FIDO
EBC19R44=CIDO&CAC*FIDO
EBC19R45=CIDO&IAS*FIDO
EBC19R46=CIDO&NFM*FIDO
EBC19R47=CIDO&MAC*FIDO
EBC19R48=CIDO&SVO*FIDO
EBC19R38=EBC19R39+EBC19R40+EBC19R41+EBC19R42+EBC19R43+EBC19R45+EBC19R47;
        +EBC19R48+EBC19R44+EBC19R46
EBC19R34=(CIDO&AGR+CIDO&FRT)*FIDO
EBC19R36=CIDO&MIN*FIDO
EBC19R37=CIDO&CON*FIDO
EBC19R33=EBC19R34+EBC19R36+EBC19R37+EBC19R38
EBC19R54=CIDO&ROD*FIDO
EBC19R55=CIDO&RLW*FIDO
EBC19R56=CIDO&NAV*FIDO
EBC19R57=CIDO&IUL*FIDO
EBC19R52=EBC19R54+EBC19R55+EBC19R56+EBC19R57
EBC19R58=CIDO&GAF*FIDO
EBC19R61=EBC19R43
EBC19R32=EBC19R33+EBC19R52+EBC19R58
EBC19R31=EBC19R32
EBC19R30=EBC19R31-EBC19R06-EBC19R17-EBC19R29
```

(17) Total of Diesel Oil

```
EBC17R02=EBC18R02+EBC19R02
EBC17R03=EBC18R03+EBC19R03
EBC17R04=EBC18R04+EBC19R04
EBC17R05=EBC18R05+EBC19R05
EBC17R06=EBC18R06+EBC19R06
EBC17R07=EBC18R07+EBC19R07
EBC17R11=EBC18R11+EBC19R11
EBC17R13=EBC18R13+EBC19R13
EBC17R14=EBC18R14+EBC19R14
EBC17R17=EBC18R17+EBC19R17
EBC17R18=EBC18R18+EBC19R18
EBC17R20=EBC18R20+EBC19R20
EBC17R23=EBC18R23+EBC19R23
EBC17R24=EBC18R24+EBC19R24
EBC17R28=EBC18R28+EBC19R28
EBC17R29=EBC18R29+EBC19R29
EBC17R30=EBC18R30+EBC19R30
EBC17R31=EBC18R31+EBC19R31
EBC17R32=EBC18R32+EBC19R32
EBC17R33=EBC18R33+EBC19R33
EBC17R34=EBC18R34+EBC19R34
EBC17R35=EBC18R35
EBC17R36=EBC18R36+EBC19R36
EBC17R37=EBC18R37+EBC19R37
EBC17R38=EBC18R38+EBC19R38
EBC17R39=EBC18R39+EBC19R39
EBC17R40=EBC18R40+EBC19R40
EBC17R41=EBC18R41+EBC19R41
```

```
EBC17R42=EBC18R42+EBC19R42
EBC17R43=EBC18R43+EBC19R43
EBC17R44=EBC18R44+EBC19R44
EBC17R45=EBC18R45+EBC19R45
EBC17R46=EBC18R46
EBC17R47=EBC18R47+EBC19R47
EBC17R48=EBC18R48+EBC19R48
EBC17R52=EBC18R52+EBC19R52
EBC17R53=EBC18R53
EBC17R54=EBC18R54+EBC19R54
EBC17R55=EBC18R55+EBC19R55
EBC17R56=EBC18R56+EBC19R56
EBC17R57=EBC18R57+EBC19R57
EBC17R58=EBC18R58+EBC19R58
EBC17R61=EBC18R61+EBC19R61
```

(18) Heavy Fuel Oil

```
EBC20R02=IHFO+FHFO
EBC20R03=-EHFO+FHFO
EBC20R04=-CHFO&IUL+FHFO
EBC20R05=(VHFO(-1)-VHFO)+FHFO
EBC20R06=EBC20R03+EBC20R05+EBC20R02
EBC20R07=PHFO&REF+FHFO
EBC20R11=-IHFO&FUB+FHFO
IHFO&AUT=AHFO&AGR+AHFO&MIN+AHFO&COH+AHFO
      &FOD+AHFO&TXT+AHFO&RUB+AHFO&PAP;
      +AHFO&FCH+AHFO&CAC+AHFO&IAS+AHFO
      &NFX+AHFO&MAC+AHFO&SVO+AHFO&RAC;
      +AHFO&GAF+AHFO&FRI+AHFO&CRF
      +AHFO&REF+AHFO&FUB+AHFO&TUG
EBC20R13=-IHFO&AUT+FHFO
EBC20R14=-IHFO&TUG+FHFO
EBC20R17=EBC20R07+EBC20R11+EBC20R13+EBC20R14
EBC20R18=-HHFO&CRF+FHFO
EBC20R20=-HHFO&REF+FHFO
EBC20R23=-HHFO&FUB+FHFO
EBC20R28=-LHFO+FHFO
EBC20R29=EBC20R18+EBC20R20+EBC20R23+EBC20R28
EBC20R39=CHFO&FOD+FHFO
EBC20R40=CHFO&TXT+FHFO
EBC20R41=CHFO&RUB+FHFO
EBC20R42=CHFO&PAP+FHFO
EBC20R43=CHFO&FCH+FHFO
EBC20R44=CHFO&CAC+FHFO
EBC20R45=CHFO&IAS+FHFO
EBC20R46=CHFO&NFX+FHFO
EBC20R47=CHFO&MAC+FHFO
EBC20R48=CHFO&SVO+FHFO
        EBC20R38=EBC20R39+EBC20R40+EBC20R41
      +EBC20R42+EBC20R43+EBC20R44+EBC20R45;
        +EBC20R46+EBC20R47+EBC20R48
EBC20R34=(CHFO&AGR+CHFO&FRI)+FHFO
EBC20R36=CHFO&MIN+FHFO
EBC20R37=CHFO&COH+FHFO
EBC20R33=EBC20R34+EBC20R37+EBC20R38+EBC20R36
EBC20R54=CHFO&ROD+FHFO
EBC20R55=CHFO&RLW+FHFO
EBC20R56=CHFO&NAV+FHFO
EBC20R57=CHFO&IUL+FHFO
EBC20R52=EBC20R54+EBC20R55+EBC20R56+EBC20R57
EBC20R58=CHFO&GAF+FHFO
EBC20R61=EBC20R43
EBC20R32=EBC20R33+EBC20R52+EBC20R58
EBC20R31=EBC20R32
EBC20R30=EBC20R31-EBC20R06-EBC20R17-EBC20R29
```

(19) Total Fuel Oil

```
EBC10R02=EBC11R02+EBC15R02+EBC16R02+EBC17R02
                                    +EBC20R02
EBC10R03=EBC20R03+EBC15R03+EBC17R03+EBC11R03
EBC10R04=EBC11R04+EBC15R04+EBC17R04+EBC20R04
EBC10R05=EBC11R05+EBC15R05+EBC16R05+EBC17R05
                                    +EBC20R05
EBC10R06=EBC11R06+EBC15R06+EBC16R06+EBC17R06
                                    +EBC20R06
EBC10R07=EBC11R07+EBC15R07+EBC16R07+EBC17R07
                                    +EBC20R07
EBC10R11=EBC17R11+EBC20R11
EBC10R13=EBC17R13+EBC20R13
EBC10R14=EBC16R14+EBC17R14+EBC20R14
EBC10R17=EBC11R17+EBC15R17+EBC16R17+EBC17R17
                                    +EBC20R17
EBC10R18=EBC17R18+EBC20R18
EBC10R20=EBC17R20+EBC20R20
EBC10R23=EBC17R23+EBC20R23
EBC10R24=EBC17R24
EBC10R28=EBC11R28+EBC15R28+EBC16R28+EBC17R28
                                    +EBC20R28
EBC10R29=EBC11R29+EBC15R29+EBC16R29+EBC17R29
                                    +EBC20R29
EBC10R30=EBC11R30+EBC15R30+EBC16R30+EBC17R30
                                    +EBC20R30
EBC10R31=EBC11R31+EBC15R31+EBC16R31+EBC17R31
                                    +EBC20R31
EBC10R32=EBC11R32+EBC15R32+EBC16R32+EBC17R32
                                    +EBC20R32
EBC10R33=EBC17R33+EBC20R33
EBC10R34=EBC17R34+EBC20R34
EBC10R35=EBC17R35
EBC10R36=EBC17R36+EBC20R36
EBC10R37=EBC17R37+EBC20R37
EBC10R38=EBC17R38+EBC20R38
EBC10R39=EBC17R39+EBC20R39
EBC10R40=EBC17R40+EBC20R40
EBC10R41=EBC17R41+EBC20R41
```

(10)

```
EBC10R42=EBC17R42+EBC20R42
EBC10R43=EBC17R43+EBC20R43
EBC10R44=EBC17R44+EBC20R44
EBC10R45=EBC17R45+EBC20R45
EBC10R46=EBC17R46+EBC20R46
EBC10R47=EBC17R47+EBC20R47
EBC10R48=EBC17R48+EBC20R48
EBC10R49=EBC16R49
EBC10R52=EBC11R52+EBC15R52+EBC17R52+EBC20R52
EBC10R53=EBC11R53+EBC15R53+EBC17R53
EBC10R54=EBC11R54+EBC17R54+EBC20R54
EBC10R55=EBC17R55+EBC20R55
EBC10R56=EBC11R56+EBC17R56+EBC20R56
EBC10R57=EBC11R57+EBC15R57+EBC17R57+EBC20R57
EBC10R58=EBC11R58+EBC15R58+EBC17R58+EBC20R58
EBC10R61=EBC17R61+EBC20R61
```

(20) Naphtha

```
EBC21R03=-ENAP*FNAP
EBC21R05=(WNAP(-1)-WNAP)*FNAP
EBC21R06=EBC21R03+EBC21R05
EBC21R07=FNAP&REF*FNAP
EBC21R09=-INAP&MOH*FNAP
EBC21R17=EBC21R07+EBC21R09
EBC21R20=-HNAP&REF*FNAP
EBC21R22=-HNAP&MOH*FNAP
EBC21R28=-LNAP*FNAP
EBC21R29=EBC21R20+EBC21R22+EBC21R28
EBC21R43=CNAP&FCH*FNAP
EBC21R38=EBC21R43
EBC21R33=EBC21R38
EBC21R32=EBC21R33
EBC21R59=CNAP&RCH*FNAP
EBC21R61=EBC21R43+EBC21R59
EBC21R31=EBC21R32+EBC21R59
EBC21R30=EBC21R31-EBC21R06-EBC21R17-EBC21R29
```

(21) Low-Sulfur Waxy Residue

```
EBC22R03=-ELSR*FLSR
EBC22R05=(WLSR(-1)-WLSR)*FLSR
EBC22R06=EBC22R03+EBC22R05
EBC22R07=FLSR&REF*FLSR
EBC22R17=EBC22R07
EBC22R20=-HLSR&REF*FLSR
EBC22R28=-LLSR*FLSR
EBC22R29=EBC22R20+EBC22R28
EBC22R30=-EBC22R06-EBC22R17-EBC22R29
```

(22) Lubricants

```
EBC23R02=ILUB*FLUB
EBC23R05=(WLUB(-1)-WLUB)*FLUB
EBC23R06=EBC23R02+EBC23R05
EBC23R07=FLUB&REF*FLUB
EBC23R17=EBC23R07
EBC23R20=-HLUB&REF*FLUB
EBC23R28=-LLUB*FLUB
EBC23R29=EBC23R20+EBC23R28
EBC23R60=CLUB&NEN*FLUB
EBC23R31=EBC23R60
EBC23R30=EBC23R31-EBC23R06-EBC23R17-EBC23R29
```

(23) Solvents

```
EBC24R02=ISOL*FSOL
EBC24R03=-ESOL*FSOL
EBC24R05=(WSOL(-1)-WSOL)*FSOL
EBC24R06=EBC24R02+EBC24R03+EBC24R05
EBC24R07=FSOL&REF*FSOL
EBC24R17=EBC24R07
EBC24R20=-HSOL&REF*FSOL
EBC24R28=-LSOL*FSOL
EBC24R29=EBC24R20+EBC24R28
EBC24R60=CSOL&NEN*FSOL
EBC24R31=EBC24R60
EBC24R30=EBC24R31-EBC24R06-EBC24R17-EBC24R29
```

(24) Other Petroleum Products

— Asphalts, Grease, Waxes —

```
EBC25R02=IASP*FASP+IGRE*FGRE+IWAX*FWAX
EBC25R03=-(EASP*FASP+EGRE*FGRE+EWAX*FWAX)
EBC25R05=(WASP(-1)-WASP)*FASP+(WGRE(-1)
         -WGRE)*FGRE+(WWAX(-1)-WWAX)*FWAX
EBC25R06=EBC25R02+EBC25R03+EBC25R05
EBC25R07=FASP&REF*FASP+FGRE&REF*FGRE+FWAX&REF
                                        *FWAX
EBC25R17=EBC25R07
EBC25R20=-HASP&REF*FASP-HGRE&REF*FGRE-HWAX&REF
                                        *FWAX
EBC25R28=-LASP*FASP-LGRE*FGRE-LWAX*FWAX
EBC25R29=EBC25R20+EBC25R28
EBC25R60=CASP&NEN*FASP+CGRE&NEN*FGRE+CWAX&NEN
                                        *FWAX
EBC25R31=EBC25R60
EBC25R30=EBC25R31-EBC25R06-EBC25R17-EBC25R29
```

(25) Petroleum Coke

```
EBC26R05=(WPCK(-1)-WPCK)*FPCK
EBC26R06=EBC26R05
EBC26R07=PPCK&REF*FPCK
EBC26R17=EBC26R07
EBC26R20=-HPCK&REF*FPCK
EBC26R28=-LPCK*FPCK
EBC26R29=EBC26R20+EBC26R28
EBC26R46=CPCK&NFX*FPCK
EBC26R38=EBC26R46
EBC26R33=EBC26R38
EBC26R32=EBC26R33
```

```
EBC26R60=CPCK&REN+FPCK
EBC26R31=EBC26R32+EBC26R60
EBC26R30=EBC26R31-EBC26R06-EBC26R17-EBC26R29
```

(26) Refinery Gas

```
EBC27R07=PRFG&REF+FRFG
EBC27R17=EBC27R07
EBC27R20=-HRFG&REF+FRFG
EBC27R28=-LRFG+FRFG
EBC27R29=EBC27R20+EBC27R28
EBC27R30=-EBC27R17-EBC27R29
```

(27) LPG

```
EBC28R02=ILPG+FLPG
EBC28R03=-ELPG+FLPG
EBC28R05=(ULPG(-1)-ULPG)+FLPG
EBC28R06=EBC28R02+EBC28R03+EBC28R05
EBC28R07=FLPG&REF+FLPG
EBC28R08=FLPG&NGL+FLPG
EBC28R17=EBC28R07+EBC28R08
EBC28R20=-HLPG&REF+FLPG
EBC28R28=-LLPG+FLPG
EBC28R29=EBC28R20+EBC28R28
EBC28R48=CLPG&SUD+FLPG
EBC28R38=EBC28R48
EBC28R35=CLPG&FIS+FLPG
EBC28R33=EBC28R35+EBC28R38
EBC28R49=CLPG&RAC+FLPG
EBC28R54=CLPG&ROD+FLPG
EBC28R52=EBC28R54
EBC28R59=CLPG&RCH+FLPG
EBC28R61=EBC28R59
EBC28R32=EBC28R33+EBC28R49+EBC28R52
EBC28R31=EBC28R32+EBC28R59
EBC28R30=EBC28R31-EBC28R06-EBC28R17-EBC28R29
```

(28) Total of Petroleum Products

```
EBC09R02=EBC10R02+EBC23R02+EBC25R02+EBC24R02+EBC28R02
EBC09R03=EBC10R03+EBC21R03+EBC22R03+EBC25R03+EBC28R03+EBC24R03
EBC09R04=EBC10R04
EBC09R05=EBC10R05+EBC21R05+EBC22R05+EBC23R05+EBC24R05+EBC25R05;
        +EBC26R05+EBC28R05
EBC09R06=EBC10R06+EBC21R06+EBC22R06+EBC23R05+EBC24R06+EBC25R06;
        +EBC26R06+EBC28R06
EBC09R07=EBC10R07+EBC21R07+EBC22R07+EBC23R07+EBC24R07+EBC25R07;
        +EBC26R07+EBC27R07+EBC28R07
EBC09R08=EBC28R08
EBC09R09=EBC21R09
EBC09R11=EBC10R11
EBC09R13=EBC10R13
EBC09R14=EBC10R14
EBC09R17=EBC10R17+EBC21R17+EBC22R17+EBC23R17+EBC24R17+EBC25R17;
        +EBC26R17+EBC27R17+EBC28R17
EBC09R18=EBC10R18
EBC09R20=EBC10R20+EBC21R20+EBC23R20+EBC25R20+EBC22R20+EBC27R20;
        +EBC26R20+EBC28R20+EBC24R20
EBC09R22=EBC21R22
EBC09R23=EBC10R23
EBC09R24=EBC10R24
EBC09R28=EBC10R28+EBC21R28+EBC22R28+EBC23R28+EBC24R28+EBC25R28;
        +EBC26R28+EBC27R28+EBC28R28
EBC09R29=EBC10R29+EBC21R29+EBC22R29+EBC23R29+EBC24R29+EBC25R29;
        +EBC26R29+EBC27R29+EBC28R29
EBC09R30=EBC10R30+EBC21R30+EBC22R30+EBC23R30+EBC24R30+EBC25R30;
        +EBC26R30+EBC27R30+EBC28R30
EBC09R31=EBC10R31+EBC21R31+EBC23R31+EBC24R31+EBC25R31+EBC26R31+EBC28R31
EBC09R32=EBC10R32+EBC21R32+EBC26R32+EBC28R32
EBC09R33=EBC10R33+EBC21R33+EBC26R33+EBC28R33
EBC09R34=EBC10R34
EBC09R35=EBC10R35+EBC28R35
EBC09R36=EBC10R36
EBC09R37=EBC10R37
```

(12)

```
EBC09R38=EBC10R38+EBC21R38+EBC26R38+EBC28R38
EBC09R39=EBC10R39
EBC09R40=EBC10R40
EBC09R41=EBC10R41
EBC09R42=EBC10R42
EBC09R43=EBC10R43+EBC21R43
EBC09R44=EBC10R44
EBC09R45=EBC10R45
EBC09R46=EBC10R46+EBC26R46
EBC09R47=EBC10R47
EBC09R48=EBC10R48+EBC28R48
EBC09R49=EBC10R49+EBC28R49
EBC09R52=EBC10R52+EBC28R52
EBC09R53=EBC10R53
EBC09R54=EBC10R54+EBC28R54
EBC09R55=EBC10R55
EBC09R56=EBC10R56
EBC09R57=EBC10R57
EBC09R58=EBC10R58
EBC09R59=EBC21R59+EBC28R59
EBC09R60=EBC23R60+EBC24R60+EBC25R60+EBC26R60
EBC09R61=EBC10R61+EBC21R61+EBC28R61
```

(29) Natural Gas

```
EBC29R01=PING+FING
EBC29R06=EBC29R01
EBC29R08=-IING3NGL+FING
EBC29R09=-IING3NOH+FING
EBC29R11=-IING3PUB+FING
EBC29R13=-(AING3NGF+AING3NGL)+FING
EBC29R14=-IING3TWG+FING
EBC29R17=EBC29R08+EBC29R09+EBC29R11+EBC29R14+EBC29R13
EBC29R19=-HING3NGF+FING
EBC29R20=-HING3REF+FING
EBC29R21=-HING3NGL+FING
EBC29R22=-HING3NOH+FING
EBC29R23=-HING3PUB+FING
EBC29R24=-HING3TWG+FING
EBC29R28=-LING+FING
EBC29R29=EBC29R19+EBC29R20+EBC29R21+EBC29R22+EBC29R23+EBC29R24+EBC29R28
EBC29R43=CING3FCH+FING
EBC29R44=CING3CAC+FING
EBC29R48=CING3SVO+FING
EBC29R38=EBC29R43+EBC29R44+EBC29R48
EBC29R33=EBC29R36
EBC29R49=CING3RAC+FING
EBC29R32=EBC29R33+EBC29R49
EBC29R59=CING3RCH+FING
EBC29R61=EBC29R43+EBC29R59
EBC29R31=EBC29R32+EBC29R59
EBC29R30=EBC29R31-EBC29R06-EBC29R17-EBC29R29
```

(30) NGL

```
EBC30R03=-ECOK*FCOK
EBC30R06=EBC30R03
EBC30R08=FCOK&NGL*FCOK
EBC30R09=-ICOK&EMA*FCOK
EBC30R17=EBC30R08+EBC30R09
EBC30R30=-EBC30R06-EBC30R17
```

(31) LNG

```
EBC31R03=-ELNG*FLNG
EBC31R06=EBC31R03
EBC31R08=PLNG&NGL*FLNG
EBC31R17=EBC31R03
EBC31R30=-EBC31R06-EBC31R17
```

(32) Methanol

```
EBC32R03=-EMOH*FMOH
EBC32R06=EBC32R03
EBC32R09=PMOH&MOH*FMOH
EBC32R17=EBC32R09
EBC32R54=CMOH&ROD*FMOH
EBC32R52=EBC32R54
EBC32R32=EBC32R52
EBC32R59=CMOH&RCH*FMOH
EBC32R61=EBC32R59
EBC32R31=EBC32R32+EBC32R59
EBC32R30=EBC32R31-EBC32R06-EBC32R17
```

(33) Town Gas

```
EBC33R14=PTWG&TWG*FTWG
EBC33R17=EBC33R14
EBC33R24=-HTWG&TWG*FTWG
EBC33R28=-LTWG*FTWG
EBC33R29=EBC33R28+EBC33R24
EBC33R44=CTWG&CAC*FTWG
EBC33R38=EBC33R44
EBC33R33=EBC33R38
EBC33R49=CTWG&RAC*FTWG
EBC33R32=EBC33R33+EBC33R49
EBC33R31=EBC33R32
EBC33R30=EBC33R31-EBC33R17-EBC33R29
```

(34) Coke

```
EBC34R02=ICOK*FCOK
EBC34R05=(WCOK(-1)-WCOK)*FCOK
EBC34R06=EBC34R02+EBC34R05
EBC34R14=PCOK&TWG*FCOK
EBC34R15=PCOK&COK*FCOK
EBC34R17=EBC34R14+EBC34R15
EBC34R45=CCOK&IAS*FCOK
EBC34R47=CCOK&MAC*FCOK
EBC34R48=CCOK&SWO*FCOK
EBC34R38=EBC34R45+EBC34R47+EBC34R48
EBC34R33=EBC34R38
EBC34R32=EBC34R33
EBC34R31=EBC34R32
EBC34R30=EBC34R31-EBC34R06-EBC34R17
```

(35) Coke Oven Gas

```
EBC35R14=-ICKG&TWG*FCKG
EBC35R15=PCKG&COK*FCKG
EBC35R17=EBC35R14+EBC35R15
EBC35R25=-HCKG&COK*FCKG
EBC35R29=EBC35R25
EBC35R30=-EBC35R17-EBC35R29
```

(36) Briquet

```
EBC37R05=(WBRQ(-1)-WBRQ)*FBRQ
EBC37R06=EBC37R05
EBC37R16=PBRQ&BRQ*FBRQ
EBC37R17=EBC37R16
EBC37R44=CBRQ&CAC*FBRQ
EBC37R38=EBC37R44
EBC37R33=EBC37R38
EBC37R49=CBRQ&RAC*FBRQ
EBC37R32=EBC37R33+EBC37R49
EBC37R31=EBC37R32
EBC37R30=EBC37R31-EBC37R06-EBC37R17
```

(37) Wood

```
EBC38R01=PWOD*FWOD
EBC38R05=(WWOD(-1)-WWOD)*FWOD
EBC38R06=EBC38R01+EBC38R05
EBC38R44=CWOD&CAC*FWOD
EBC38R38=EBC38R44
EBC38R34=(CWOD&AGR+CWOD&FRT)*FWOD
EBC38R33=EBC38R38+EBC38R34
EBC38R49=CWOD&RAC*FWOD
EBC38R55=CWOD&RLW*FWOD
EBC38R52=EBC38R55
EBC38R32=EBC38R33+EBC38R49+EBC38R52
EBC38R31=EBC38R32
EBC38R30=EBC38R31-EBC38R06
```

(38) Charcoal

```
EBC39R01=PCHR*FCHR
EBC39R05=(WCHR(-1)-WCHR)*FCHR
EBC39R06=EBC39R01+EBC39R05
EBC39R49=CCHR&RAC*FCHR
EBC39R32=EBC39R49
EBC39R31=EBC39R32
EBC39R30=EBC39R31-EBC39R06
```

(39) Fuel Ethanol (from Biomass)

```
EBC40R01=PEOH*FEOH
EBC40R03=-EEOH*FEOH
EBC40R05=(WEOH(-1)-WEOH)*FEOH
```

```
EBC40R06=EBC40R01+EBC40R03+EBC40R05
EBC40R54=CEOH&ROD+FEOH
EBC40R52=EBC40R54
EBC40R32=EBC40R52
EBC40R59=CEOH&RCH+FEOH
EBC40R61=EBC40R59
EBC40R31=EBC40R32+EBC40R59
EBC40R30=EBC40R31-EBC40R06
```

(40) Agricultural Wastes

```
EBC41R01=PAGW+FAGW
EBC41R06=EBC41R01
EBC41R44=CAGW&CAC+FAGW
EBC41R38=EBC41R44
EBC41R34=(CAGW&AGR+CAGW&FRT)+FAGW
EBC41R33=EBC41R34+EBC41R38
EBC41R49=CAGW&RAC+FAGW
EBC41R32=EBC41R33+EBC41R49
EBC41R31=EBC41R32
EBC41R30=EBC41R31-EBC41R06
```

(41) Hydro Generation in Public Utility

```
EBC42R01=PHPE&PUB+FELI
EBC42R06=EBC42R01
EBC42R11=-EBC42R06
EBC42R17=EBC42R11
```

(42) Nuclear Generation in Public Utility

```
EBC44R01=PNPE&PUB+FELI
EBC44R06=EBC44R01
EBC44R11=-EBC44R06
EBC44R17=EBC44R11
```

(43) Geothermal Generation in Public Utility

```
EBC45R01=PGPE&PUB+FELI
EBC45R06=EBC45R01
EBC45R11=-EBC45R06
EBC45R17=EBC45R11
```

(44) Other Generation in Public Utility

```
EBC47R01=POPE&PUB+FELI
EBC47R06=EBC47R01
EBC47R11=-EBC47R06
EBC47R17=EBC47R11
```

(45) Hydro Auto-Generation

```
EBC43R01=PHAE&AUT+FELI
EBC43R06=EBC43R01
EBC43R13=-EBC43R06
EBC43R17=EBC43R13
```

(46) Other Auto-Generation

```
EBC48R01=POAE&AUT+FELI
EBC48R06=EBC48R01
EBC48R13=-EBC48R06
EBC48R17=EBC48R13
```

(47) Geothermal Auto-Generation

```
EBC46R01=PGAE&AUT+FELI
EBC46R06=EBC46R01
EBC46R13=-EBC46R06
EBC46R17=EBC46R13
```

(48) Total of Auto-Generation

```
EBC51R13=-(EBC01R13+EBC09R13+EBC29R13)*FELO/FELI;
        +(PHAE&AUT+PGAE&AUT+POAE&AUT)*FELO
EBC51R17=EBC51R13
EBC51R18=-(AADO&CRF*FADO+AIDO&CRF*FIDO+AHFO&CRF*FHFO)*FELO/FELI
EBC51R19=-AING&RGF*FING*FELO/FELI
EBC51R20=-(AADO&REF*FADO+AIDO&REF*FIDO+AHFO&REF*FHFO)*FELO/FELI
EBC51R21=-AING&RGL*FING*FELO/FELI
EBC51R23=-(AADO&PUB*FADO+AIDO&PUB*FIDO+AHFO&PUB*FHFO)*FELO/FELI
EBC51R24=-(AADO&TWG*FADO+AIDO&TWG*FIDO+AHFO&TWG*FHFO)*FELO/FELI
EBC51R27=EBC03R13*FELO/FELI
EBC51R39=(AADO&FOD*FADO+AIDO&FOD*FIDO+AHFO&FOD*FHFO)*FELO/FELI
EBC51R40=(AADO&TXI*FADO+AIDO&TXI*FIDO+AHFO&TXI*FHFO)*FELO/FELI
EBC51R41=(AADO&RUB*FADO+AIDO&RUB*FIDO+AHFO&RUB*FHFO)*FELO/FELI
EBC51R42=(AADO&PAP*FADO+AIDO&PAP*FIDO+AHFO&PAP*FHFO)*FELO/FELI
EBC51R43=(AADO&FCH*FADO+AIDO&FCH*FIDO+AHFO&FCH*FHFO)*FELO/FELI
EBC51R44=(AADO&CAC*FADO+AIDO&CAC*FIDO+AHFO&CAC*FHFO)*FELO/FELI
EBC51R45=(AADO&IAS*FADO+AIDO&IAS*FIDO+AHFO&IAS*FHFO)*FELO/FELI
EBC51R46=(AADO&NFM*FADO+AIDO&NFM*FIDO+AHFO&NAC*FHFO)*FELO/FELI
EBC51R47=(AADO&NAC*FADO+AIDO&NAC*FIDO+AHFO&NAC*FHFO)*FELO/FELI
EBC51R48=(AADO&SVO*FADO+AIDO&SVO*FIDO+AHFO&SVO*FHFO)*FELO/FELI
```

```
EBC51R38=EBC51R39+EBC51R40+EBC51R41+EBC51R42+EBC51R43;
         +EBC51R44+EBC51R45+EBC51R46+EBC51R47+EBC51R48
EBC51R34=(AAD03AGR+FAD0+AI003AGR+FI00+AHF03AGR+FHF0)+FELO/FEL1;
         +(AAD03FRT+FAD0+AI003FRT+FI00+AHF03FRT+FHF0)+FELO/FEL1
EBC51R36=(AAD03MIN+FAD0+AI003MIN+FI00+AHF03MIN+FHF0)+FELO/FEL1+PHAF3AUT+FELO
EBC51R37=(AAD03CON+FAD0+AI003CON+FI00+AHF03CON+FHF0)+FELO/FEL1
EBC51R33=EBC51R34+EBC51R36+EBC51R37+EBC51R38
EBC51R49=(AAD03RAC+FAD0+AI003RAC+FI00+AHF03RAC+FHF0)+FELO/FEL1
EBC51R58=(AAD03GAF+FAD0+AI003GAF+FI00+AHF03GAF+FHF0)+FELO/FEL1
EBC51R32=EBC51R33+EBC51R49+EBC51R58
EBC51R61=EBC51R43
EBC51R31=EBC51R32
EBC51R28=EBC51R31-EBC51R13-EBC51R18-EBC51R20-EBC51R23;
         -EBC51R24-EBC51R27
EBC51R29=EBC51R18+EBC51R20+EBC51R23+EBC51R24+EBC51R27;
         +EBC51R28+EBC51R19+EBC51R21
```

(49) Total of Public Utility

```
EBC50R11=PPEL3PUB+FELO
EBC50R13=PPEL3AUT+FELO
EBC50R17=EBC50R11+EBC50R13
EBC50R18=-HPEL3CRF+FELO
EBC50R19=-HPEL3RGF+FELO
EBC50R20=-HPEL3REF+FELO
EBC50R21=-HPEL3HGL+FELO
EBC50R23=-HPEL3PUB+FELO
EBC50R24=-HPEL3TWG+FELO
EBC50R26=-HPEL3BRG+FELO
EBC50R39=CPEL3FOB+FELO
EBC50R40=CPEL3TXT+FELO
EBC50R41=CPEL3RUB+FELO
EBC50R42=CPEL3PAP+FELO
EBC50R43=CPEL3FCH+FELO
EBC50R44=CPEL3CAC+FELO
EBC50R45=CPEL3TAS+FELO
EBC50R46=CPEL3RFX+FELO
EBC50R47=CPEL3MAC+FELO
EBC50R48=CPEL3SSO+FELO
EBC50R38=EBC50R39+EBC50R40+EBC50R41+EBC50R42+EBC50R43;
         +EBC50R44+EBC50R45+EBC50R46+EBC50R47+EBC50R48
EBC50R34=(CPEL3AGR+CPEL3FRT)+FELO
EBC50R36=CPEL3MIN+FELO
EBC50R37=CPEL3CON+FELO
EBC50R33=CPEL3TIN+FELO
EBC50R49=CPEL3RAC+FELO
EBC50R55=CPEL3RLV+FELO
EBC50R52=EBC50R55
EBC50R58=CPEL3GAF+FELO
EBC50R32=EBC50R33+EBC50R49+EBC50R52+EBC50R58
EBC50R61=EBC50R43
EBC50R31=EBC50R32
EBC50R28=EBC50R31-EBC50R17-EBC50R18-EBC50R19-EBC50R20;
         -EBC50R21-EBC50R23-EBC50R24-EBC50R26
EBC50R29=EBC50R18+EBC50R19+EBC50R20+EBC50R21+EBC50R23;
         +EBC50R24+EBC50R26+EBC50R28
```

(50) Electricity Total

```
EBC49R11=EBC50R11
EBC49R13=EBC51R13+EBC50R13
EBC49R17=EBC50R17+EBC51R17
EBC49R18=EBC50R18+EBC51R18
EBC49R19=EBC50R19
EBC49R20=EBC50R20+EBC51R20
EBC49R21=EBC50R21
EBC49R23=EBC50R23+EBC51R23
EBC49R24=EBC50R24+EBC51R24
EBC49R26=EBC50R26
EBC49R27=EBC51R27
EBC49R39=EBC50R39+EBC51R39
EBC49R40=EBC50R40+EBC51R40
EBC49R41=EBC50R41+EBC51R41
EBC49R42=EBC50R42+EBC51R42
EBC49R43=EBC50R43+EBC51R43
EBC49R44=EBC50R44+EBC51R44
EBC49R45=EBC50R45+EBC51R45
EBC49R46=EBC50R46+EBC51R46
EBC49R47=EBC50R47+EBC51R47
EBC49R48=EBC50R48+EBC51R48
EBC49R38=EBC50R38+EBC51R38
EBC49R34=EBC50R34+EBC51R34
EBC49R36=EBC50R36+EBC51R36
EBC49R37=EBC50R37+EBC51R37
EBC49R33=EBC50R33+EBC51R33
EBC49R49=EBC50R49+EBC51R49
EBC49R55=EBC50R55
EBC49R52=EBC50R52
EBC49R58=EBC50R58+EBC51R58
EBC49R32=EBC50R32+EBC51R32
EBC49R61=EBC50R61+EBC51R61
EBC49R31=EBC50R31+EBC51R31
EBC49R28=EBC50R28+EBC51R28
EBC49R29=EBC50R29+EBC51R29
```

(51) Grand Total

```
EBC52R01=EBC01R01+EBC06R01+EBC29R01+EBC38R01+EBC39R01;
         +EBC40R01+EBC41R01+EBC42R01+EBC43R01+EBC44R01;
         +EBC45R01+EBC46R01+EBC47R01+EBC48R01
EBC52R02=EBC01R02+EBC06R02+EBC09R02+EBC34R02
EBC52R03=EBC01R03+EBC06R03+EBC09R03+EBC30R03+EBC31R03;
         +EBC32R03+EBC40R03
EBC52R04=EBC09R04
EBC52R05=EBC01R05+EBC06R05+EBC09R05+EBC34R05+EBC37R05;
         +EBC38R05+EBC39R05+EBC40R05
EBC52R06=EBC01R06+EBC06R06+EBC09R06+EBC29R06+EBC30R06;
         +EBC31R06+EBC32R06+EBC34R06+EBC37R06+EBC38R06;
         +EBC39R06+EBC40R06+EBC41R06+EBC42R06+EBC43R06;
         +EBC44R06+EBC45R06+EBC46R06+EBC47R06+EBC48R06
EBC52R07=EBC06R07+EBC09R07
EBC52R08==EBC09R08+EBC29R08+EBC30R08+EBC31R08
EBC52R09=EBC09R09+EBC29R09+EBC30R09+EBC32R09
EBC52R11=EBC01R11+EBC09R11+EBC29R11+EBC42R11+EBC44R11;
         +EBC45R11+EBC47R11+EBC49R11
EBC52R13=EBC01R13+EBC09R13+EBC43R13+EBC46R13+EBC48R13+EBC49R13+EBC29R13
EBC52R14=EBC01R14+EBC09R14+EBC29R14+EBC33R14+EBC34R14+EBC35R14
EBC52R15=EBC01R15+EBC34R15+EBC35R15
EBC52R16=EBC01R16+EBC37R16
EBC52R17=EBC01R17+EBC06R17+EBC09R17+EBC29R17+EBC30R17;
         +EBC31R17+EBC32R17+EBC33R17+EBC34R17+EBC35R17;
         +EBC37R17+EBC42R17+EBC43R17+EBC44R17+EBC45R17;
         +EBC46R17+EBC47R17+EBC48R17+EBC49R17
EBC52R18=EBC06R18+EBC09R18+EBC49R18
EBC52R19=EBC29R19+EBC49R19
EBC52R20=EBC06R20+EBC09R20+EBC29R20+EBC49R20
EBC52R21=EBC29R21+EBC49R21
EBC52R22=EBC09R22+EBC29R22
EBC52R23=EBC09R23+EBC29R23+EBC49R23
EBC52R24=EBC09R24+EBC29R24+EBC33R24+EBC49R24
EBC52R25=EBC35R25
EBC52R26=EBC49R26
```

```
EBC52R27=EBC01R27+EBC49R27
EBC52R28=EBC01R28+EBC06R28+EBC09R28+EBC29R28+EBC33R28+EBC47R28
EBC52R29=EBC01R29+EBC06R29+EBC09R29+EBC29R29+EBC33R29;
        +EBC35R29+EBC49R29
EBC52R39=EBC09R39+EBC49R39
EBC52R40=EBC09R40+EBC49R40
EBC52R41=EBC09R41+EBC49R41
EBC52R42=EBC09R42+EBC49R42
EBC52R43=EBC09R43+EBC29R43+EBC49R43
EBC52R44=EBC01R44+EBC09R44+EBC29R44+EBC33R44+EBC37R44;
        +EBC38R44+EBC41R44+EBC49R44
EBC52R45=EBC09R45+EBC34R45+EBC49R45
EBC52R46=EBC01R46+EBC09R46+EBC49R46
EBC52R47=EBC09R47+EBC34R47+EBC49R47
EBC52R48=EBC01R48+EBC09R48+EBC29R48+EBC49R48+EBC34R48
EBC52R38=EBC01R38+EBC09R38+EBC29R38+EBC33R38+EBC34R38;
        +EBC37R38+EBC38R38+EBC41R38+EBC49R38
EBC52R34=EBC09R34+EBC38R34+EBC41R34+EBC49R34
EBC52R35=EBC09R35
EBC52R36=EBC01R36+EBC09R36+EBC49R36
EBC52R37=EBC09R37+EBC49R37
EBC52R33=EBC01R33+EBC09R33+EBC29R33+EBC33R33+EBC34R33;
        +EBC37R33+EBC38R33+EBC41R33+EBC49R33
EBC52R49=EBC09R49+EBC29R49+EBC33R49+EBC37R49+EBC38R49;
        +EBC39R49+EBC41R49+EBC49R49
EBC52R53=EBC09R53
EBC52R54=EBC09R54+EBC32R54+EBC40R54
EBC52R55=EBC01R55+EBC09R55+EBC38R55+EBC49R55
EBC52R56=EBC09R56
EBC52R57=EBC09R57
EBC52R52=EBC01R52+EBC09R52+EBC32R52+EBC38R52+EBC40R52;
        +EBC49R52
EBC52R58=EBC09R58+EBC49R58
EBC52R32=EBC01R32+EBC09R32+EBC29R32+EBC32R32+EBC33R32;
        +EBC34R32+EBC37R32+EBC38R32+EBC39R32+EBC40R32+EBC41R32+EBC49R32
EBC52R59=EBC09R59+EBC29R59+EBC32R59+EBC40R59
EBC52R60=EBC01R60+EBC09R60
EBC52R61=EBC09R61+EBC29R61+EBC32R61+EBC40R61+EBC49R61
EBC52R31=EBC01R31+EBC09R31+EBC29R31+EBC32R31+EBC33R31;
        +EBC34R31+EBC37R31+EBC38R31+EBC39R31+EBC40R31;
        +EBC41R31+EBC49R31
EBC52R30=EBC01R30+EBC06R30+EBC09R30+EBC29R30+EBC30R30;
        +EBC31R30+EBC32R30+EBC33R30+EBC34R30+EBC35R30;
        +EBC37R30+EBC38R30+EBC39R30+EBC40R30+EBC41R30
```

3. Preparing Method of Commodity Balance Equations

The code, CBC**R**, preceding numerical values shown in each field of the commodity balance table consists of initial letters; CB stands for "Commodity Balance." C for "Column," and R for "Row." Stated in the positions of the marks of "**" are specific numbers of a column or a row.

The data on individual types of energy shown in the fiscal 1980 commodity balance table were obtained by adjusting numerical values shown in the energy balance table with appropriate heat quantity scale factors. For instance, commodity balance equations for domestic production and import of steam coal are expressed as follows.

Domestic Production
CBC03R01 = EBC03R01/FSCO

Import
CBC03R02 = EBC03R02/FSCO

However, because a numerical display acceptable for the balance tables is six-digit figures at the largest, a numerical value, which consists of more than six-digit figures as the result of adjustment with a heat quantity scale factor, should be modulated by changing the scale of its unit. For example, data on crude oil are shown in a unit of BBL. Though the unit of BBL is acceptable when the data are to be contained in the basic energy statistics, it is not when the data are to be contained in the commodity balance table. This is because the data, when adjusted with a scale factor, come to consist of figures exceeding six-digit. Accordingly, the data should be shown in a unit of 10^3 BBL in the commodity balance table. In these cases, commodity balance equations are modulated based on power-law to offset the difference in the scale of units. In consequence, they are expressed as follows.

Domestic Production of Crude Oil
CBC07R01 = EBC0701/FOCR/10**3

Import of Crude Oil
CBC07R02 = EBC07R02/FOCR/10**3

Export of Crude Oil
CBC07R03 = EBC07R03/FOCR/10**3

Due to the absence of heat quantity scale factors peculiar to such fields as "coal/total," "crude oil/total" and "fuel oil/total" of the commodity balance table, numerical values stated in the columns of individual types of energy in the commodity balance table are summed up to produce the total. For instance, domestic production to be stated in the column of "coal/total" is expressed as follows.

CBC01R01 = CBC03R01 + CBC04R01 + CBC05R01

4. List of Commodity Balance Equations

(1) Coking Coal

```
CBC02R02=EBC02R02/FCCO
CBC02R05=EBC02R05/FCCO
CBC02R06=EBC02R06/FCCO
CBC02R14=EBC02R14/FCCO
CBC02R15=EBC02R15/FCCO
CBC02R17=EBC02R17/FCCO
CBC02R28=EBC02R28/FCCO
CBC02R29=EBC02R29/FCCO
CBC02R30=EBC02R30/FCCO
```

(2) Steam Coal

```
CBC03R01=EBC03R01/FSCO
CBC03R03=EBC03R03/FSCO
CBC03R05=EBC03R05/FSCO
CBC03R06=EBC03R06/FSCO
CBC03R11=EBC03R11/FSCO
CBC03R13=EBC03R13/FSCO
CBC03R14=EBC03R14/FSCO
CBC03R16=EBC03R16/FSCO
CBC03R17=EBC03R17/FSCO
CBC03R27=EBC03R27/FSCO
CBC03R28=EBC03R28/FSCO
CBC03R29=EBC03R29/FSCO
CBC03R44=EBC03R44/FSCO
CBC03R46=EBC03R46/FSCO
CBC03R38=EBC03R38/FSCO
CBC03R36=EBC03R36/FSCO
CBC03R33=EBC03R33/FSCO
CBC03R55=EBC03R55/FSCO
CBC03R32=EBC03R32/FSCO
CBC03R52=EBC03R52/FSCO
CBC03R31=EBC03R31/FSCO
CBC03R30=EBC03R30/FSCO
```

(3) Anthracite

```
CBC04R01=EBC04R01/FACO
CBC04R03=EBC04R03/FACO
CBC04R05=EBC04R05/FACO
CBC04R06=EBC04R06/FACO
CBC04R27=EBC04R27/FACO
CBC04R28=EBC04R28/FACO
CBC04R29=EBC04R29/FACO
CBC04R46=EBC04R46/FACO
CBC04R38=EBC04R38/FACO
CBC04R36=EBC04R36/FACO
CBC04R33=EBC04R33/FACO
CBC04R32=EBC04R32/FACO
CBC04R60=EBC04R60/FACO
CBC04R31=EBC04R31/FACO
CBC04R30=EBC04R30/FACO
```

(4) Lignite

```
CBC05R01=EBC05R01/FLCO
CBC05R05=EBC05R05/FLCO
CBC05R06=EBC05R06/FLCO
CBC05R28=EBC05R28/FLCO
CBC05R29=EBC05R29/FLCO
CBC05R44=EBC05R44/FLCO
CBC05R38=EBC05R38/FLCO
CBC05R33=EBC05R33/FLCO
CBC05R32=EBC05R32/FLCO
CBC05R31=EBC05R31/FLCO
CBC05R30=EBC05R30/FLCO
```

(5) Original Crude Oil

```
CBC07R01=EBC07R01/FOCR/10**3
CBC07R02=EBC07R02/FOCR/10**3
CBC07R03=EBC07R03/FOCR/10**3
CBC07R05=EBC07R05/FOCR/10**3
CBC07R06=EBC07R06/FOCR/10**3
CBC07R07=EBC07R07/FOCR/10**3
CBC07R17=EBC07R17/FOCR/10**3
CBC07R18=EBC07R18/FOCR/10**3
CBC07R20=EBC07R20/FOCR/10**3
CBC07R28=EBC07R28/FOCR/10**3
CBC07R29=EBC07R29/FOCR/10**3
CBC07R30=EBC07R30/FOCR/10**3
```

(6) Reduced Crude Oil

```
CBC08R02=EBC08R02/FABS/10**3
CBC08R05=EBC08R05/FABS/10**3
CBC08R06=EBC08R06/FABS/10**3
CBC08R07=EBC08R07/FABS/10**3
CBC08R17=EBC08R17/FABS/10**3
CBC08R28=EBC08R28/FABS/10**3
CBC08R29=EBC08R29/FABS/10**3
CBC08R30=EBC08R30/FABS/10**3
```

(7) Aviation Gasoline

```
CBC12R02=EBC12R02/FAGS/10**3
CBC12R03=EBC12R03/FAGS/10**3
CBC12R04=EBC12R04/FAGS/10**3
CBC12R05=EBC12R05/FAGS/10**3
CBC12R06=EBC12R06/FAGS/10**3
CBC12R07=EBC12R07/FAGS/10**3
CBC12R17=EBC12R17/FAGS/10**3
CBC12R28=EBC12R28/FAGS/10**3
CBC12R29=EBC12R29/FAGS/10**3
CBC12R53=EBC12R53/FAGS/10**3
CBC12R57=EBC12R57/FAGS/10**3
CBC12R52=EBC12R52/FAGS/10**3
CBC12R58=EBC12R58/FAGS/10**3
CBC12R32=EBC12R32/FAGS/10**3
CBC12R31=EBC12R31/FAGS/10**3
CBC12R30=EBC12R30/FAGS/10**3
```

(8) Super Gasoline

```
CBC13R02=EBC13R02/FSGS/10**3
CBC13R05=EBC13R05/FSGS/10**3
CBC13R06=EBC13R06/FSGS/10**3
CBC13R07=EBC13R07/FSGS/10**3
CBC13R17=EBC13R17/FSGS/10**3
CBC13R28=EBC13R28/FSGS/10**3
CBC13R29=EBC13R29/FSGS/10**3
CBC13R54=EBC13R54/FSGS/10**3
CBC13R52=EBC13R52/FSGS/10**3
CBC13R58=EBC13R58/FSGS/10**3
CBC13R32=EBC13R32/FSGS/10**3
CBC13R31=EBC13R31/FSGS/10**3
CBC13R30=EBC13R30/FSGS/10**3
```

(9) Premium Gasoline

```
CBC14R02=EBC14R02/FPGS/10**3
CBC14R03=EBC14R03/FPGS/10**3
CBC14R05=EBC14R05/FPGS/10**3
CBC14R06=EBC14R06/FPGS/10**3
CBC14R07=EBC14R07/FPGS/10**3
CBC14R17=EBC14R17/FPGS/10**3
CBC14R28=EBC14R28/FPGS/10**3
CBC14R29=EBC14R29/FPGS/10**3
CBC14R54=EBC14R54/FPGS/10**3
CBC14R56=EBC14R56/FPGS/10**3
CBC14R52=EBC14R52/FPGS/10**3
CBC14R58=EBC14R58/FPGS/10**3
CBC14R32=EBC14R32/FPGS/10**3
CBC14R31=EBC14R31/FPGS/10**3
CBC14R30=EBC14R30/FPGS/10**3
```

(10) Jet Fuel

```
CBC15R02=EBC15R02/FJET/10**3
CBC15R03=EBC15R03/FJET/10**3
CBC15R04=EBC15R04/FJET/10**3
CBC15R05=EBC15R05/FJET/10**3
CBC15R06=EBC15R06/FJET/10**3
CBC15R07=EBC15R07/FJET/10**3
CBC15R17=EBC15R17/FJET/10**3
CBC15R28=EBC15R28/FJET/10**3
CBC15R29=EBC15R29/FJET/10**3
CBC15R53=EBC15R53/FJET/10**3
CBC15R57=EBC15R57/FJET/10**3
CBC15R52=EBC15R52/FJET/10**3
CBC15R58=EBC15R58/FJET/10**3
CBC15R32=EBC15R32/FJET/10**3
CBC15R31=EBC15R31/FJET/10**3
CBC15R30=EBC15R30/FJET/10**3
```

(11) Kerosene

```
CBC16R02=EBC16R02/FKER/10**3
CBC16R05=EBC16R05/FKER/10**3
CBC16R06=EBC16R06/FKER/10**3
CBC16R07=EBC16R07/FKER/10**3
CBC16R14=EBC16R14/FKER/10**3
CBC16R17=EBC16R17/FKER/10**3
CBC16R28=EBC16R28/FKER/10**3
CBC16R29=EBC16R29/FKER/10**3
CBC16R49=EBC16R49/FKER/10**3
CBC16R32=EBC16R32/FKER/10**3
CBC16R31=EBC16R31/FKER/10**3
CBC16R30=EBC16R30/FKER/10**3
```

(12) Automotive Diesel Oil

```
CBC18R02=EBC18R02/FADO/10**3
CBC18R03=EBC18R03/FADO/10**3
CBC18R04=EBC18R04/FADO/10**3
CBC18R05=EBC18R05/FADO/10**3
CBC18R06=EBC18R06/FADO/10**3
CBC18R07=EBC18R07/FADO/10**3
CBC18R11=EBC18R11/FADO/10**3
CBC18R13=EBC18R13/FADO/10**3
CBC18R14=EBC18R14/FADO/10**3
CBC18R17=EBC18R17/FADO/10**3
CBC18R18=EBC18R18/FADO/10**3
CBC18R20=EBC18R20/FADO/10**3
CBC18R23=EBC18R23/FADO/10**3
CBC18R24=EBC18R24/FADO/10**3
CBC18R28=EBC18R28/FADO/10**3
CBC18R29=EBC18R29/FADO/10**3
CBC18R39=EBC18R39/FADO/10**3
CBC18R40=EBC18R40/FADO/10**3
CBC18R41=EBC18R41/FADO/10**3
CBC18R42=EBC18R42/FADO/10**3
CBC18R43=EBC18R43/FADO/10**3
CBC18R44=EBC18R44/FADO/10**3
CBC18R45=EBC18R45/FADO/10**3
CBC18R46=EBC18R46/FADO/10**3
CBC18R47=EBC18R47/FADO/10**3
CBC18R48=EBC18R48/FADO/10**3
CBC18R38=EBC18R38/FADO/10**3
CBC18R34=EBC18R34/FADO/10**3
CBC18R35=EBC18R35/FADO/10**3
CBC18R36=EBC18R36/FADO/10**3
CBC18R37=EBC18R37/FADO/10**3
CBC18R33=EBC18R33/FADO/10**3
CBC18R53=EBC18R53/FADO/10**3
CBC18R54=EBC18R54/FADO/10**3
CBC18R55=EBC18R55/FADO/10**3
CBC18R56=EBC18R56/FADO/10**3
CBC18R57=EBC18R57/FADO/10**3
CBC18R52=EBC18R52/FADO/10**3
CBC18R58=EBC18R58/FADO/10**3
CBC18R61=EBC18R61/FADO/10**3
CBC18R32=EBC18R32/FADO/10**3
CBC18R31=EBC18R31/FADO/10**3
CBC18R30=EBC18R30/FADO/10**3
```

(13) Industrial Diesel Oil

```
C&C19R02=E&C19R02/FIDO/10**3
C&C19R03=E&C19R03/FIDO/10**3
C&C19R04=E&C19R04/FIDO/10**3
C&C19R05=E&C19R05/FIDO/10**3
C&C19R06=E&C19R06/FIDO/10**3
C&C19R07=E&C19R07/FIDO/10**3
C&C19R11=E&C19R11/FIDO/10**3
C&C19R13=E&C19R13/FIDO/10**3
C&C19R14=E&C19R14/FIDO/10**3
C&C19R17=E&C19R17/FIDO/10**3
C&C19R18=E&C19R18/FIDO/10**3
C&C19R20=E&C19R20/FIDO/10**3
C&C19R23=E&C19R23/FIDO/10**3
C&C19R24=E&C19R24/FIDO/10**3
C&C19R28=E&C19R28/FIDO/10**3
C&C19R29=E&C19R29/FIDO/10**3
C&C19R39=E&C19R39/FIDO/10**3
C&C19R40=E&C19R40/FIDO/10**3
C&C19R41=E&C19R41/FIDO/10**3
C&C19R42=E&C19R42/FIDO/10**3
C&C19R43=E&C19R43/FIDO/10**3
C&C19R44=E&C19R44/FIDO/10**3
C&C19R45=E&C19R45/FIDO/10**3
C&C19R47=E&C19R47/FIDO/10**3
C&C19R48=E&C19R48/FIDO/10**3
C&C19R38=E&C19R38/FIDO/10**3
C&C19R34=E&C19R34/FIDO/10**3
C&C19R36=E&C19R36/FIDO/10**3
C&C19R37=E&C19R37/FIDO/10**3
C&C19R33=E&C19R33/FIDO/10**3
C&C19R54=E&C19R54/FIDO/10**3
C&C19R55=E&C19R55/FIDO/10**3
C&C19R56=E&C19R56/FIDO/10**3
C&C19R57=E&C19R57/FIDO/10**3
C&C19R52=E&C19R52/FIDO/10**3
C&C19R58=E&C19R58/FIDO/10**3
C&C19R61=E&C19R61/FIDO/10**3
C&C19R32=E&C19R32/FIDO/10**3
C&C19R31=E&C19R31/FIDO/10**3
C&C19R30=E&C19R30/FIDO/10**3
```

(14) Heavy Fuel Oil

```
C&C20R02=E&C20R02/FHFO/10**3
C&C20R03=E&C20R03/FHFO/10**3
C&C20R04=E&C20R04/FHFO/10**3
C&C20R05=E&C20R05/FHFO/10**3
C&C20R06=E&C20R06/FHFO/10**3
C&C20R07=E&C20R07/FHFO/10**3
C&C20R11=E&C20R11/FHFO/10**3
C&C20R13=E&C20R13/FHFO/10**3
C&C20R14=E&C20R14/FHFO/10**3
C&C20R17=E&C20R17/FHFO/10**3
C&C20R18=E&C20R18/FHFO/10**3
C&C20R20=E&C20R20/FHFO/10**3
C&C20R23=E&C20R23/FHFO/10**3
C&C20R28=E&C20R28/FHFO/10**3
C&C20R29=E&C20R29/FHFO/10**3
C&C20R39=E&C20R39/FHFO/10**3
C&C20R40=E&C20R40/FHFO/10**3
C&C20R41=E&C20R41/FHFO/10**3
C&C20R42=E&C20R42/FHFO/10**3
C&C20R43=E&C20R43/FHFO/10**3
C&C20R44=E&C20R44/FHFO/10**3
C&C20R45=E&C20R45/FHFO/10**3
C&C20R46=E&C20R46/FHFO/10**3
C&C20R47=E&C20R47/FHFO/10**3
C&C20R48=E&C20R48/FHFO/10**3
C&C20R38=E&C20R38/FHFO/10**3
C&C20R34=E&C20R34/FHFO/10**3
C&C20R36=E&C20R36/FHFO/10**3
C&C20R37=E&C20R37/FHFO/10**3
C&C20R33=E&C20R33/FHFO/10**3
C&C20R54=E&C20R54/FHFO/10**3
C&C20R55=E&C20R55/FHFO/10**3
C&C20R56=E&C20R56/FHFO/10**3
C&C20R57=E&C20R57/FHFO/10**3
C&C20R52=E&C20R52/FHFO/10**3
C&C20R58=E&C20R58/FHFO/10**3
C&C20R61=E&C20R61/FHFO/10**3
C&C20R32=E&C20R32/FHFO/10**3
C&C20R31=E&C20R31/FHFO/10**3
C&C20R30=E&C20R30/FHFO/10**3
```

(15) Naphtha

```
C&C21R03=E&C21R03/FNAP/10**3
C&C21R05=E&C21R05/FNAP/10**3
C&C21R06=E&C21R06/FNAP/10**3
C&C21R07=E&C21R07/FNAP/10**3
C&C21R09=E&C21R09/FNAP/10**3
C&C21R17=E&C21R17/FNAP/10**3
C&C21R20=E&C21R20/FNAP/10**3
C&C21R22=E&C21R22/FNAP/10**3
C&C21R28=E&C21R28/FNAP/10**3
C&C21R29=E&C21R29/FNAP/10**3
C&C21R43=E&C21R43/FNAP/10**3
C&C21R38=E&C21R38/FNAP/10**3
C&C21R33=E&C21R33/FNAP/10**3
C&C21R32=E&C21R32/FNAP/10**3
C&C21R59=E&C21R59/FNAP/10**3
C&C21R61=E&C21R61/FNAP/10**3
C&C21R31=E&C21R31/FNAP/10**3
C&C21R30=E&C21R30/FNAP/10**3
```

(16) Low Sulfur Waxy Residue

```
C&C22R03=E&C22R03/FLSR/10**3
C&C22R05=E&C22R05/FLSR/10**3
C&C22R06=E&C22R06/FLSR/10**3
C&C22R07=E&C22R07/FLSR/10**3
C&C22R17=E&C22R17/FLSR/10**3
```

C&C22R20=E&C22R20/FLSR/10**3
C&C22R28=E&C22R28/FLSR/10**3
C&C22R29=E&C22R29/FLSR/10**3
C&C22R30=E&C22R30/FLSR/10**3

(17) Lubricants

C&C23R02=E&C23R02/FLUB/10**3
C&C23R05=E&C23R05/FLUB/10**3
C&C23R06=E&C23R06/FLUB/10**3
C&C23R07=E&C23R07/FLUB/10**3
C&C23R17=E&C23R17/FLUB/10**3
C&C23R20=E&C23R20/FLUB/10**3
C&C23R28=E&C23R28/FLUB/10**3
C&C23R29=E&C23R29/FLUB/10**3
C&C23R60=E&C23R60/FLUB/10**3
C&C23R31=E&C23R31/FLUB/10**3
C&C23R30=E&C23R30/FLUB/10**3

(18) Solvents

C&C24R02=E&C24R02/FSOL/10**3
C&C24R03=E&C24R03/FSOL/10**3
C&C24R05=E&C24R05/FSOL/10**3
C&C24R06=E&C24R06/FSOL/10**3
C&C24R07=E&C24R07/FSOL/10**3
C&C24R17=E&C24R17/FSOL/10**3
C&C24R20=E&C24R20/FSOL/10**3
C&C24R28=E&C24R28/FSOL/10**3
C&C24R29=E&C24R29/FSOL/10**3
C&C24R60=E&C24R60/FSOL/10**3
C&C24R31=E&C24R31/FSOL/10**3
C&C24R30=E&C24R30/FSOL/10**3

(19) Other Petroleum Products

— Asphalts, Grease, Waxes —

C&C25R02=E&C25R02/FASP/10**3
C&C25R03=E&C25R03/FASP/10**3
C&C25R05=E&C25R05/FASP/10**3
C&C25R06=E&C25R06/FASP/10**3
C&C25R07=E&C25R07/FASP/10**3
C&C25R17=E&C25R17/FASP/10**3
C&C25R20=E&C25R20/FASP/10**3
C&C25R28=E&C25R28/FASP/10**3
C&C25R29=E&C25R29/FASP/10**3
C&C25R60=E&C25R60/FASP/10**3
C&C25R31=E&C25R31/FASP/10**3
C&C25R30=E&C25R30/FASP/10**3

(20) Petroleum Coke

C&C26R05=E&C26R05/FPCK/10**3
C&C26R06=E&C26R06/FPCK/10**3
C&C26R07=E&C26R07/FPCK/10**3
C&C26R17=E&C26R17/FPCK/10**3
C&C26R20=E&C26R20/FPCK/10**3
C&C26R28=E&C26R28/FPCK/10**3
C&C26R29=E&C26R29/FPCK/10**3
C&C26R46=E&C26R46/FPCK/10**3
C&C26R36=E&C26R36/FPCK/10**3
C&C26R33=E&C26R33/FPCK/10**3
C&C26R32=E&C26R32/FPCK/10**3
C&C26R60=E&C26R60/FPCK/10**3
C&C26R31=E&C26R31/FPCK/10**3
C&C26R30=E&C26R30/FPCK/10**3

(21) Refinery Gas

C&C27R07=E&C27R07/FRFG
C&C27R17=E&C27R17/FRFG
C&C27R20=E&C27R20/FRFG
C&C27R28=E&C27R28/FRFG
C&C27R29=E&C27R29/FRFG
C&C27R30=E&C27R30/FRFG

(22) LPG

C&C28R02=E&C28R02/FLPG/10**3
C&C28R05=E&C28R05/FLPG/10**3
C&C28R06=E&C28R06/FLPG/10**3
C&C28R07=E&C28R07/FLPG/10**3
C&C28R08=E&C28R08/FLPG/10**3
C&C28R17=E&C28R17/FLPG/10**3
C&C28R20=E&C28R20/FLPG/10**3
C&C28R28=E&C28R28/FLPG/10**3
C&C28R29=E&C28R29/FLPG/10**3
C&C28R48=E&C28R48/FLPG/10**3
C&C28R38=E&C28R38/FLPG/10**3
C&C28R35=E&C28R35/FLPG/10**3
C&C28R33=E&C28R33/FLPG/10**3
C&C28R49=E&C28R49/FLPG/10**3
C&C28R54=E&C28R54/FLPG/10**3
C&C28R52=E&C28R52/FLPG/10**3
C&C28R59=E&C28R59/FLPG/10**3
C&C28R61=E&C28R61/FLPG/10**3
C&C28R32=E&C28R32/FLPG/10**3
C&C28R31=E&C28R31/FLPG/10**3
C&C28R30=E&C28R30/FLPG/10**3

(23) Natural Gas

C&C29R01=E&C29R01/FTNG/10**3
C&C29R06=E&C29R06/FTNG/10**3
C&C29R08=E&C29R08/FTNG/10**3
C&C29R09=E&C29R09/FTNG/10**3
C&C29R11=E&C29R11/FTNG/10**3
C&C29R13=E&C29R13/FTNG/10**3
C&C29R14=E&C29R14/FTNG/10**3
C&C29R17=E&C29R17/FTNG/10**3
C&C29R19=E&C29R19/FTNG/10**3
C&C29R20=E&C29R20/FTNG/10**3
C&C29R21=E&C29R21/FTNG/10**3
C&C29R22=E&C29R22/FTNG/10**3
C&C29R23=E&C29R23/FTNG/10**3
C&C29R24=E&C29R24/FTNG/10**3
C&C29R28=E&C29R28/FTNG/10**3
C&C29R29=E&C29R29/FTNG/10**3

```
C&C29R43=E&C29R43/FING/10**3
C&C29R44=E&C29R44/FING/10**3
C&C29R48=E&C29R48/FING/10**3
C&C29R38=E&C29R38/FING/10**3
C&C29R33=E&C29R33/FING/10**3
C&C29R49=E&C29R49/FING/10**3
C&C29R32=E&C29R32/FING/10**3
C&C29R59=E&C29R59/FING/10**3
C&C29R61=E&C29R61/FING/10**3
C&C29R31=E&C29R31/FING/10**3
C&C29R30=E&C29R30/FING/10**3
```

(24) NGL

```
C&C30R03=E&C30R03/FCON/10**3
C&C30R06=E&C30R06/FCON/10**3
C&C30R08=E&C30R08/FCON/10**3
C&C30R09=E&C30R09/FCON/10**3
C&C30R17=E&C30R17/FCON/10**3
C&C30R30=E&C30R30/FCON/10**3
```

(25) LNG

```
C&C31R03=E&C31R03/FLNG/10**3
C&C31R06=E&C31R06/FLNG/10**3
C&C31R08=E&C31R08/FLNG/10**3
C&C31R17=E&C31R17/FLNG/10**3
C&C31R30=E&C31R30/FLNG/10**3
```

(26) Methanol

```
C&C32R03=E&C32R03/FMOA/10**3
C&C32R06=E&C32R06/FMOA/10**3
C&C32R09=E&C32R09/FMOA/10**3
C&C32R17=E&C32R17/FMOA/10**3
C&C32R54=E&C32R54/FMOA/10**3
C&C32R52=E&C32R52/FMOA/10**3
C&C32R32=E&C32R32/FMOA/10**3
C&C32R59=E&C32R59/FMOA/10**3
C&C32R61=E&C32R61/FMOA/10**3
C&C32R31=E&C32R31/FMOA/10**3
C&C32R30=E&C32R30/FMOA/10**3
```

(27) Town Gas

```
C&C33R14=E&C33R14/FTWG/10**3
C&C33R17=E&C33R17/FTWG/10**3
C&C33R24=E&C33R24/FTWG/10**3
C&C33R28=E&C33R28/FTWG/10**3
C&C33R29=E&C33R29/FTWG/10**3
C&C33R44=E&C33R44/FTWG/10**3
C&C33R38=E&C33R38/FTWG/10**3
C&C33R33=E&C33R33/FTWG/10**3
C&C33R49=E&C33R49/FTWG/10**3
C&C33R32=E&C33R32/FTWG/10**3
C&C33R31=E&C33R31/FTWG/10**3
C&C33R30=E&C33R30/FTWG/10**3
```

(28) Coke

```
C&C34R02=E&C34R02/FCOK
C&C34R05=E&C34R05/FCOK
C&C34R06=E&C34R06/FCOK
C&C34R14=E&C34R14/FCOK
C&C34R15=E&C34R15/FCOK
C&C34R17=E&C34R17/FCOK
C&C34R45=E&C34R45/FCOK
C&C34R47=E&C34R47/FCOK
C&C34R38=E&C34R38/FCOK
C&C34R33=E&C34R33/FCOK
C&C34R32=E&C34R32/FCOK
C&C34R31=E&C34R31/FCOK
C&C34R30=E&C34R30/FCOK
```

(29) Coke Oven Gas

```
C&C35R14=E&C35R14/FCKG
C&C35R15=E&C35R15/FCKG
C&C35R17=E&C35R17/FCKG
C&C35R25=E&C35R25/FCKG
C&C35R29=E&C35R29/FCKG
C&C35R30=E&C35R30/FCKG
```

(30) Briquet

```
C&C37R05=E&C37R05/FBRQ
C&C37R06=E&C37R06/FBRQ
C&C37R16=E&C37R16/FBRQ
C&C37R17=E&C37R17/FBRQ
C&C37R44=E&C37R44/FBRQ
C&C37R38=E&C37R38/FBRQ
C&C37R33=E&C37R33/FBRQ
C&C37R49=E&C37R49/FBRQ
C&C37R32=E&C37R32/FBRQ
C&C37R31=E&C37R31/FBRQ
C&C37R30=E&C37R30/FBRQ
```

(31) Wood

```
C&C38R01=E&C38R01/FWOD/10**3
C&C38R05=E&C38R05/FWOD/10**3
C&C38R06=E&C38R06/FWOD/10**3
C&C38R44=E&C38R44/FWOD/10**3
C&C38R38=E&C38R38/FWOD/10**3
C&C38R34=E&C38R34/FWOD/10**3
C&C38R33=E&C38R33/FWOD/10**3
C&C38R49=E&C38R49/FWOD/10**3
C&C38R55=E&C38R55/FWOD/10**3
C&C38R52=E&C38R52/FWOD/10**3
C&C38R32=E&C38R32/FWOD/10**3
C&C38R31=E&C38R31/FWOD/10**3
C&C38R30=E&C38R30/FWOD/10**3
```

(32) Charcoal

```
C&C39R01=E&C39R01/FCHR
C&C39R05=E&C39R05/FCHR
C&C39R06=E&C39R06/FCHR
```

```
CBC39R49=EBC39R49/FCHR
CBC39R32=EBC39R32/FCHR
CBC39R31=EBC39R31/FCHR
CBC39R30=EBC39R30/FCHR
```

(33) Fuel Ethanol (from Biomass)

```
CBC40R01=EBC40R01/FEFA
CBC40R03=EBC40R03/FEFA
CBC40R05=EBC40R05/FEFA
CBC40R06=EBC40R06/FEFA
CBC40R54=EBC40R54/FEFA
CBC40R52=EBC40R52/FEFA
CBC40R59=EBC40R59/FEFA
CBC40R32=EBC40R32/FEFA
CBC40R61=EBC40R61/FEFA
CBC40R31=EBC40R31/FEFA
CBC40R30=EBC40R30/FEFA
```

(34) Agricultural Wastes

```
CBC41R01=EBC41R01/FAGW/10**3
CBC41R06=EBC41R06/FAGW/10**3
CBC41R44=EBC41R44/FAGW/10**3
CBC41R38=EBC41R38/FAGW/10**3
CBC41R34=EBC41R34/FAGW/10**3
CBC41R33=EBC41R33/FAGW/10**3
CBC41R49=EBC41R49/FAGW/10**3
CBC41R32=EBC41R32/FAGW/10**3
CBC41R31=EBC41R31/FAGW/10**3
CBC41R30=EBC41R30/FAGW/10**3
```

(35) Hydro Generation in Public Utility

```
CBC42R01=EBC42R01/FELI/10**3
CBC42R06=EBC42R06/FELI/10**3
CBC42R11=EBC42R11/FELI/10**3
CBC42R17=EBC42R17/FELI/10**3
```

(36) Hydro Auto-Generation

```
CBC43R01=EBC43R01/FELI/10**3
CBC43R06=EBC43R06/FELI/10**3
CBC43R13=EBC43R13/FELI/10**3
CBC43R17=EBC43R17/FELI/10**3
```

(37) Nuclear Generation in Public Utility

```
CBC44R01=EBC44R01/FELI/10**3
CBC44R06=EBC44R06/FELI/10**3
CBC44R11=EBC44R11/FELI/10**3
CBC44R17=EBC44R17/FELI/10**3
```

(38) Geothermal Generation in Public Utility

```
CBC45R01=EBC45R01/FELI/10**3
CBC45R06=EBC45R06/FELI/10**3
CBC45R11=EBC45R11/FELI/10**3
CBC45R17=EBC45R17/FELI/10**3
```

(39) Geothermal Auto-Generation

```
CBC46R01=EBC46R01/FELI/10**3
CBC46R06=EBC46R06/FELI/10**3
CBC46R13=EBC46R13/FELI/10**3
CBC46R17=EBC46R17/FELI/10**3
```

(40) Other Generation in Public Utility

```
CBC47R01=EBC47R01/FELI/10**3
CBC47R06=EBC47R06/FELI/10**3
CBC47R11=EBC47R11/FELI/10**3
CBC47R17=EBC47R17/FELI/10**3
```

(41) Other Auto-Generation

```
CBC48R01=EBC48R01/FELI/10**3
CBC48R06=EBC48R06/FELI/10**3
CBC48R13=EBC48R13/FELO/10**3
CBC48R17=EBC48R17/FELO/10**3
```

(42) Electricity Total

```
CBC49R11=EBC49R11/FELO/10**3
CBC49R13=EBC49R13/FELO/10**3
CBC49R17=EBC49R17/FELO/10**3
CBC49R18=EBC49R18/FELO/10**3
CBC49R19=EBC49R19/FELO/10**3
CBC49R20=EBC49R20/FELO/10**3
CBC49R21=EBC49R21/FELO/10**3
CBC49R23=EBC49R23/FELO/10**3
CBC49R24=EBC49R24/FELO/10**3
CBC49R26=EBC49R26/FELO/10**3
CBC49R27=EBC49R27/FELO/10**3
CBC49R39=EBC49R39/FELO/10**3
CBC49R40=EBC49R40/FELO/10**3
CBC49R41=EBC49R41/FELO/10**3
CBC49R42=EBC49R42/FELO/10**3
CBC49R43=EBC49R43/FELO/10**3
CBC49R44=EBC49R44/FELO/10**3
CBC49R45=EBC49R45/FELO/10**3
CBC49R46=EBC49R46/FELO/10**3
CBC49R47=EBC49R47/FELO/10**3
CBC49R48=EBC49R48/FELO/10**3
CBC49R38=EBC49R38/FELO/10**3
CBC49R34=EBC49R34/FELO/10**3
CBC49R36=EBC49R36/FELO/10**3
CBC49R37=EBC49R37/FELO/10**3
CBC49R33=EBC49R33/FELO/10**3
CBC49R49=EBC49R49/FELO/10**3
CBC49R55=EBC49R55/FELO/10**3
CBC49R52=EBC49R52/FELO/10**3
CBC49R58=EBC49R58/FELO/10**3
CBC49R32=EBC49R32/FELO/10**3
CBC49R61=EBC49R61/FELO/10**3
CBC49R31=EBC49R31/FELO/10**3
CBC49R28=EBC49R28/FELO/10**3
CBC49R29=EBC49R29/FELO/10**3
```

(43) Total of Public Utility

```
CBC50R11=EBC50R11/FELO/10**3
CBC50R13=EBC50R13/FELO/10**3
```

```
C$C50R17=E$C50R17/FELO/10**3
C$C50R18=E$C50R18/FELO/10**3
C$C50R19=E$C50R19/FELO/10**3
C$C50R20=E$C50R20/FELO/10**3
C$C50R21=E$C50R21/FELO/10**3
C$C50R23=E$C50R23/FELO/10**3
C$C50R24=E$C50R24/FELO/10**3
C$C50R26=E$C50R26/FELO/10**3
C$C50R39=E$C50R39/FELO/10**3
C$C50R40=E$C50R40/FELO/10**3
C$C50R41=E$C50R41/FELO/10**3
C$C50R42=E$C50R42/FELO/10**3
C$C50R43=E$C50R43/FELO/10**3
C$C50R44=E$C50R44/FELO/10**3
C$C50R45=E$C50R45/FELO/10**3
C$C50R46=E$C50R46/FELO/10**3
C$C50R47=E$C50R47/FELO/10**3
C$C50R48=E$C50R48/FELO/10**3
C$C50R35=E$C50R38/FELO/10**3
C$C50R34=E$C50R34/FELO/10**3
C$C50R36=E$C50R36/FELO/10**3
C$C50R37=E$C50R37/FELO/10**3
C$C50R33=E$C50R33/FELO/10**3
C$C50R49=E$C50R49/FELO/10**3
C$C50R55=E$C50R55/FELO/10**3
C$C50R52=E$C50R52/FELO/10**3
C$C50R58=E$C50R58/FELO/10**3
C$C50R32=E$C50R32/FELO/10**3
C$C50R61=E$C50R61/FELO/10**3
C$C50R31=E$C50R31/FELO/10**3
C$C50R28=E$C50R28/FELO/10**3
C$C50R27=E$C50R27/FELO/10**3
```

(44) Total of Auto-Generation

```
C$C51R13=E$C51R13/FELO/10**3
C$C51R17=E$C51R17/FELO/10**3
C$C51R18=E$C51R18/FELO/10**3
C$C51R19=E$C51R19/FELO/10**3
C$C51R20=E$C51R20/FELO/10**3
C$C51R21=E$C51R21/FELO/10**3
C$C51R23=E$C51R23/FELO/10**3
C$C51R24=E$C51R24/FELO/10**3
C$C51R27=E$C51R27/FELO/10**3
C$C51R39=E$C51R39/FELO/10**3
C$C51R40=E$C51R40/FELO/10**3
C$C51R41=E$C51R41/FELO/10**3
C$C51R42=E$C51R42/FELO/10**3
C$C51R43=E$C51R43/FELO/10**3
C$C51R44=E$C51R44/FELO/10**3
C$C51R45=E$C51R45/FELO/10**3
C$C51R46=E$C51R46/FELO/10**3
C$C51R47=E$C51R47/FELO/10**3
C$C51R48=E$C51R48/FELO/10**3
C$C51R38=E$C51R38/FELO/10**3
C$C51R34=E$C51R34/FELO/10**3
C$C51R36=E$C51R36/FELO/10**3
C$C51R37=E$C51R37/FELO/10**3
C$C51R33=E$C51R33/FELO/10**3
C$C51R49=E$C51R49/FELO/10**3
C$C51R58=E$C51R58/FELO/10**3
C$C51R32=E$C51R32/FELO/10**3
C$C51R61=E$C51R61/FELO/10**3
C$C51R31=E$C51R31/FELO/10**3
C$C51R28=E$C51R28/FELO/10**3
C$C51R27=E$C51R27/FELO/10**3
```

(45) Total of Coal

```
C$C01R01=C$C03R01+C$C04R01+C$C05R01
C$C01R02=C$C02R02
C$C01R03=C$C03R03+C$C04R03
C$C01R05=C$C02R05+C$C03R05+C$C04R05+C$C05R05
C$C01R06=C$C02R06+C$C03R06+C$C04R06+C$C05R06
C$C01R11=C$C03R11
C$C01R13=C$C03R13
C$C01R14=C$C02R14+C$C03R14
C$C01R15=C$C02R15
C$C01R16=C$C03R16
C$C01R17=C$C02R17+C$C03R17
C$C01R27=C$C03R27+C$C04R27
C$C01R28=C$C02R28+C$C03R28+C$C04R28+C$C05R28
C$C01R29=C$C02R29+C$C03R29+C$C04R29+C$C05R29
C$C01R30=C$C02R30+C$C03R30+C$C04R30+C$C05R30
C$C01R31=C$C03R31+C$C04R31+C$C05R31
C$C01R32=C$C03R32+C$C04R32+C$C05R32
C$C01R33=C$C03R33+C$C04R33+C$C05R33
C$C01R36=C$C03R36+C$C04R36
C$C01R38=C$C03R38+C$C04R38+C$C05R38
C$C01R44=C$C03R44+C$C05R44
C$C01R46=C$C04R46
C$C01R48=C$C03R48
C$C01R52=C$C03R52
C$C01R55=C$C03R55
C$C01R60=C$C04R60
```

(46) Total of Crude Oil

```
C$C06R01=C$C07R01
C$C06R02=C$C07R02+C$C08R02
C$C06R03=C$C07R03
C$C06R05=C$C07R05+C$C08R05
C$C06R06=C$C07R06+C$C08R06
C$C06R07=C$C07R07+C$C08R07
C$C06R17=C$C07R17+C$C08R17
C$C06R18=C$C07R18
C$C06R20=C$C07R20
C$C06R28=C$C07R28+C$C08R28
C$C06R29=C$C07R29+C$C08R29
C$C06R30=C$C07R30+C$C08R30
```

(47) Total of Gasoline

```
C$C11R02=C$C12R02+C$C13R02+C$C14R02
C$C11R03=C$C12R03+C$C14R03
```

(26)

```
CBC11R04=CBC12R04
CBC11R05=CBC12R05+CBC13R05+CBC14R05
CBC11R06=CBC12R06+CBC13R06+CBC14R06
CBC11R07=CBC12R07+CBC13R07+CBC14R07
CBC11R17=CBC12R17+CBC13R17+CBC14R17
CBC11R28=CBC12R28+CBC13R28+CBC14R28
CBC11R29=CBC12R29+CBC13R29+CBC14R29
CBC11R30=CBC12R30+CBC13R30+CBC14R30
CBC11R31=CBC12R31+CBC13R31+CBC14R31
CBC11R32=CBC12R32+CBC13R32+CBC14R32
CBC11R52=CBC12R52+CBC13R52+CBC14R52
CBC11R53=CBC12R53
CBC11R54=CBC13R54+CBC14R54
CBC11R56=CBC14R56
CBC11R57=CBC12R57
CBC11R58=CBC12R58+CBC13R58+CBC14R58
```

(48) Total of Diesel Oil

```
CBC17R02=CBC18R02+CBC19R02
CBC17R03=CBC18R03+CBC19R03
CBC17R04=CBC18R04+CBC19R04
CBC17R05=CBC18R05+CBC19R05
CBC17R06=CBC18R06+CBC19R06
CBC17R07=CBC18R07+CBC19R07
CBC17R11=CBC18R11+CBC19R11
CBC17R13=CBC18R13+CBC19R13
CBC17R14=CBC18R14+CBC19R14
CBC17R17=CBC18R17+CBC19R17
CBC17R18=CBC18R18+CBC19R18
CBC17R20=CBC18R20+CBC19R20
CBC17R23=CBC18R23+CBC19R23
CBC17R24=CBC18R24+CBC19R24
CBC17R28=CBC18R28+CBC19R28
CBC17R29=CBC18R29+CBC19R29
CBC17R30=CBC18R30+CBC19R30
CBC17R31=CBC18R31+CBC19R31
CBC17R32=CBC18R32+CBC19R32
CBC17R33=CBC18R33+CBC19R33
CBC17R34=CBC18R34+CBC19R34
CBC17R35=CBC18R35
CBC17R36=CBC18R36+CBC19R36
CBC17R37=CBC18R37+CBC19R37
CBC17R38=CBC18R38+CBC19R38
CBC17R39=CBC18R39+CBC19R39
CBC17R40=CBC18R40+CBC19R40
CBC17R41=CBC18R41+CBC19R41
CBC17R42=CBC18R42+CBC19R42
CBC17R43=CBC18R43+CBC19R43
CBC17R44=CBC18R44+CBC19R44
CBC17R45=CBC18R45+CBC19R45
CBC17R46=CBC18R46
CBC17R47=CBC18R47+CBC19R47
CBC17R48=CBC18R48+CBC19R48
CBC17R52=CBC18R52+CBC19R52
CBC17R53=CBC18R53
CBC17R54=CBC18R54+CBC19R54
CBC17R55=CBC18R55+CBC19R55
CBC17R56=CBC18R56+CBC19R56
CBC17R57=CBC18R57+CBC19R57
CBC17R58=CBC18R58+CBC19R58
CBC17R61=CBC18R61+CBC19R61
```

(49) Total of Fuel Oil

```
CBC10R02=CBC11R02+CBC15R02+CBC17R02+CBC20R02+CBC16R02
CBC10R03=CBC20R03+CBC11R03+CBC15R03+CBC17R03
CBC10R04=CBC11R04+CBC15R04+CBC17R04+CBC20R04
CBC10R05=CBC11R05+CBC15R05+CBC16R05+CBC17R05+CBC20R05
CBC10R06=CBC11R06+CBC15R06+CBC16R06+CBC17R06+CBC20R06
CBC10R07=CBC11R07+CBC15R07+CBC16R07+CBC17R07+CBC20R07
CBC10R11=CBC17R11+CBC20R11
CBC10R13=CBC17R13+CBC20R13
CBC10R14=CBC16R14+CBC17R14+CBC20R14
CBC10R17=CBC11R17+CBC15R17+CBC16R17+CBC17R17+CBC20R17
CBC10R18=CBC17R18+CBC20R18
CBC10R20=CBC17R20+CBC20R20
CBC10R23=CBC17R23+CBC20R23
CBC10R24=CBC17R24
CBC10R28=CBC11R28+CBC15R28+CBC16R28+CBC17R28+CBC20R28
CBC10R29=CBC11R29+CBC15R29+CBC16R29+CBC17R29+CBC20R29
CBC10R30=CBC11R30+CBC15R30+CBC16R30+CBC17R30+CBC20R30
CBC10R31=CBC11R31+CBC15R31+CBC16R31+CBC17R31+CBC20R31
CBC10R32=CBC11R32+CBC15R32+CBC16R32+CBC17R32+CBC20R32
CBC10R33=CBC17R33+CBC20R33
CBC10R34=CBC17R34+CBC20R34
CBC10R35=CBC17R35
CBC10R36=CBC17R36+CBC20R36
```

```
CBC10R37=CBC17R37+CBC20R37
CBC10R38=CBC17R38+CBC20R38
CBC10R39=CBC17R39+CBC20R39
CBC10R40=CBC17R40+CBC20R40
CBC10R41=CBC17R41+CBC20R41
CBC10R42=CBC17R42+CBC20R42
CBC10R43=CBC17R43+CBC20R43
CBC10R44=CBC17R44+CBC20R44
CBC10R45=CBC17R45+CBC20R45
CBC10R46=CBC17R46+CBC20R46
CBC10R47=CBC17R47+CBC20R47
CBC10R48=CBC17R48+CBC20R48
CBC10R49=CBC16R49
CBC10R52=CBC11R52+CBC15R52+CBC17R52+CBC20R52
CBC10R53=CBC11R53+CBC15R53+CBC17R53
CBC10R54=CBC11R54+CBC17R54+CBC20R54
CBC10R55=CBC17R55+CBC20R55
CBC10R56=CBC11R56+CBC17R56+CBC20R56
CBC10R58=CBC11R58+CBC15R58+CBC17R58+CBC20R58
CBC10R57=CBC11R57+CBC15R57+CBC17R57+CBC20R57
CBC10R61=CBC17R61+CBC20R61
```

5. Preparing Method of Concise Energy Balance Equations

The code, CTC**R**, preceding numerical values shown in each field of the concise energy balance table consists of initial letters; CT stands for "Concise Table," C for "Column," and R for "Row." Stated in the positions of the marks of "**" are specific numbers of a column or a row.

The concise energy balance table, to be used as the basic data for preparing an energy supply-demand forecast model, is prepared by summing up data stated in each field of the detailed energy balance table.

Accordingly, the concise energy balance equations employ the codes representing numerical values stated in the detailed energy balance table. Listed below are examples of concise energy balance equations.

Domestic Production of Solid Fuel
CTC01R01 = EBC01R01

Export of Crude Oil
CTC02R03 = EBC06R03

Input Automotive Diesel Oil into Power Generation
CTC08R09 = EBC18R11 + EBC18R13

6. List of Concise Energy Balance Equations

(1) Solid Fuel

```
CIC01R01=EBC01R01
CIC01R02=EBC01R02+EBC34R02
CIC01R03=EBC01R03
CIC01R05=EBC01R05+EBC34R05+EBC37R05
CIC01R06=EBC01R06+EBC34R06+EBC37R06
CIC01R09=EBC01R11+EBC01R13
        CIC01R10=EBC01R14+EBC01R15+EBC01R16
              , +EBC34R14+EBC34R15+EBC37R16
CIC01R11=EBC01R27
CIC01R12=EBC01R28
CIC01R13=EBC01R30+EBC34R30+EBC37R30
CIC01R14=EBC01R31+EBC34R31+EBC37R31
CIC01R15=EBC01R32+EBC34R32+EBC37R32
CIC01R16=EBC01R33+EBC34R33+EBC37R33
CIC01R17=EBC37R49
CIC01R18=EBC01R52
CIC01R20=EBC01R60
```

(2) Crude Oil

```
CIC02R01=EBC06R01
CIC02R02=EBC06R02
CIC02R03=EBC06R03
CIC02R05=EBC06R05
CIC02R06=EBC06R06
CIC02R07=EBC06R07
CIC02R11=EBC06R18+EBC06R20
CIC02R12=EBC06R28
CIC02R13=EBC06R30
```

(3) Total of Petroleum Products

```
CIC03R02=EBC09R02
CIC03R03=EBC09R03
CIC03R04=EBC09R04
CIC03R05=EBC09R05
CIC03R06=EBC09R06
CIC03R07=EBC09R07
CIC03R08=EBC09R08+EBC09R09
CIC03R09=EBC09R11+EBC09R13
CIC03R10=EBC09R14
CIC03R11=EBC09R20+EBC09R22+EBC09R23+
                    EBC09R24+EBC09R18
CIC03R12=EBC09R28
CIC03R13=EBC09R30
CIC03R14=EBC09R31
CIC03R15=EBC09R32
CIC03R16=EBC09R33
CIC03R17=EBC09R49
CIC03R18=EBC09R52
CIC03R19=EBC09R58
CIC03R20=EBC09R59+EBC09R60
```

(4) Total of Fuel Oil

```
CIC04R02=EBC10R02
CIC04R03=EBC10R03
CIC04R04=EBC10R04
CIC04R05=EBC10R05
CIC04R06=EBC10R06
CIC04R07=EBC10R07
CIC04R09=EBC10R11+EBC10R13
CIC04R10=EBC10R14
CIC04R11=EBC10R20+EBC10R23+EBC10R24+EBC10R18
CIC04R12=EBC10R28
CIC04R13=EBC10R30
CIC04R14=EBC10R31
CIC04R15=EBC10R32
CIC04R16=EBC10R33
CIC04R17=EBC10R49
CIC04R18=EBC10R52
CIC04R19=EBC10R58
```

(5) Gasoline

```
CIC05R02=EBC11R02
CIC05R03=EBC11R03
CIC05R04=EBC11R04
CIC05R05=EBC11R05
CIC05R06=EBC11R06
CIC05R07=EBC11R07
CIC05R12=EBC11R28
CIC05R13=EBC11R30
CIC05R14=EBC11R31
CIC05R15=EBC11R32
CIC05R16=EBC11R52
CIC05R19=EBC11R58
```

(6) Jet Fuel

```
CIC06R02=EBC15R02
CIC06R03=EBC15R03
CIC06R04=EBC15R04
CIC06R05=EBC15R05
CIC06R06=EBC15R06
CIC06R07=EBC15R07
CIC06R12=EBC15R28
CIC06R13=EBC15R30
CIC06R14=EBC15R31
CIC06R15=EBC15R32
CIC06R16=EBC15R52
CIC06R19=EBC15R58
```

(7) Kerosene

```
CIC07R02=EBC16R02
CIC07R05=EBC16R05
CIC07R06=EBC16R06
CIC07R07=EBC16R07
CIC07R10=EBC16R14
CIC07R12=EBC16R28
```

CIC07R13=EBC16R30
CIC07R14=EBC16R31
CIC07R15=EBC16R32
CIC07R17=EBC16R49

(8) Automotive Diesel Oil

CIC08R02=EBC18R02
CIC08R03=EBC18R03
CIC08R04=EBC18R04
CIC08R05=EBC18R05
CIC08R06=EBC18R06
CIC08R07=EBC18R07
CIC08R09=EBC18R11+EBC18R13
CIC08R10=EBC18R14
CIC08R11=EBC18R18+EBC18R20+EBC18R23+EBC18R24
CIC08R12=EBC18R28
CIC08R13=EBC18R30
CIC08R14=EBC18R31
CIC08R15=EBC18R32
CIC08R16=EBC18R33
CIC08R18=EBC18R52
CIC08R19=EBC18R58

(9) Industrial Diesel Oil

CIC09R02=EBC19R02
CIC09R03=EBC19R03
CIC09R04=EBC19R04
CIC09R05=EBC19R05
CIC09R06=EBC19R06
CIC09R07=EBC19R07
CIC09R09=EBC19R11+EBC19R13
CIC09R10=EBC19R14
CIC09R11=EBC19R18+EBC19R20+EBC19R23+EBC19R24
CIC09R12=EBC19R28
CIC09R13=EBC19R30
CIC09R14=EBC19R31
CIC09R15=EBC19R32
CIC09R16=EBC19R33
CIC09R18=EBC19R52
CIC09R19=EBC19R58

(10) Heavy Fuel Oil

CIC10R02=EBC20R02
CIC10R03=EBC20R03
CIC10R04=EBC20R04
CIC10R05=EBC20R05
CIC10R06=EBC20R06
CIC10R07=EBC20R07
CIC10R09=EBC20R11+EBC20R13
CIC10R10=EBC20R14
CIC10R11=EBC20R18+EBC20R20+EBC20R23
CIC10R12=EBC20R28
CIC10R13=EBC20R30
CIC10R14=EBC20R31
CIC10R15=EBC20R32
CIC10R16=EBC20R33
CIC10R18=EBC20R52
CIC10R19=EBC20R58

(11) Naphtha

CIC11R03=EBC21R03
CIC11R05=EBC21R05
CIC11R06=EBC21R06
CIC11R07=EBC21R07
CIC11R08=EBC21R09
CIC11R11=EBC21R20+EBC21R22
CIC11R12=EBC21R28
CIC11R13=EBC21R30
CIC11R14=EBC21R31
CIC11R15=EBC21R32
CIC11R16=EBC21R33
CIC11R20=EBC21R59

(12) LPG

CIC12R02=EBC28R02
CIC12R03=EBC28R03
CIC12R05=EBC28R05
CIC12R06=EBC28R06
CIC12R07=EBC28R07
CIC12R08=EBC28R08
CIC12R12=EBC28R28
CIC12R13=EBC28R30
CIC12R14=EBC28R31
CIC12R15=EBC28R32
CIC12R16=EBC28R33
CIC12R17=EBC28R49
CIC12R18=EBC28R52
CIC12R20=EBC28R59

(13) Other Petroleum Products

CIC13R02=EBC23R02+EBC24R02+EBC25R02
CIC13R03=EBC22R03+EBC25R03+EBC24R03
CIC13R05=EBC22R05+EBC23R05+EBC24R05+EBC25R05
+EBC26R05
CIC13R06=EBC22R06+EBC23R06+EBC24R06+EBC25R06
+EBC26R06
CIC13R07=EBC22R07+EBC23R07+EBC24R07+EBC25R07
+EBC26R07+EBC27R07
CIC13R11=EBC22R20+EBC23R20+EBC24R20+EBC25R20
+EBC26R20+EBC27R20
CIC13R12=EBC22R28+EBC23R28+EBC24R28+EBC25R28
+EBC26R28+EBC27R28
CIC13R13=EBC22R30+EBC23R30+EBC24R30+EBC25R30
+EBC26R30+EBC27R30
CIC13R14=EBC23R31+EBC24R31+EBC25R31+EBC26R31
CIC13R15=EBC26R32
CIC13R16=EBC26R33
CIC13R20=EBC23R60+EBC24R60+EBC25R60+EBC26R60

(14) Natural Gas

CIC14R01=EBC29R01
CIC14R06=EBC29R06
CIC14R08=EBC29R08+EBC29R09
CIC14R09=EBC29R11
CIC14R10=EBC29R14
CIC14R11=EBC29R19+EBC29R20+EBC29R21
+EBC29R22+EBC29R23+EBC29R24
CIC14R12=EBC29R28
CIC14R13=EBC29R30
CIC14R14=EBC29R31
CIC14R15=EBC29R32
CIC14R16=EBC29R33
CIC14R17=EBC29R49
CIC14R20=EBC29R59

(15) NGL

CIC15R03=EBC30R03
CIC15R06=EBC30R06
CIC15R08=EBC30R08+EBC30R09
CIC15R13=EBC30R30

(16) LNG

CIC16R03=EBC31R03
CIC16R06=EBC31R06
CIC16R08=EBC31R08
CIC16R13=EBC31R30

(17) Methanol

CIC17R03=EBC32R03
CIC17R06=EBC32R06
CIC17R08=EBC32R09
CIC17R13=EBC32R30
CIC17R14=EBC32R31
CIC17R15=EBC32R32
CIC17R18=EBC32R52
CIC17R20=EBC32R59

(18) Town Gas

CIC18R10=EBC33R14
CIC18R11=EBC33R24
CIC18R12=EBC33R28
CIC18R13=EBC33R30
CIC18R14=EBC33R31
CIC18R15=EBC33R32
CIC18R16=EBC33R33
CIC18R17=EBC33R49

(19) Other Gas

CIC19R10=EBC35R14+EBC35R15
CIC19R11=EBC35R25
CIC19R13=EBC35R30

(20) Hydro Generation

CIC20R01=EBC42R01+EBC43R01
CIC20R06=EBC42R06+EBC43R06
CIC20R09=EBC42R11+EBC43R13

(21) Geothermal Generation

CIC21R01=EBC45R01+EBC46R01
CIC21R06=EBC45R06+EBC46R06
CIC21R09=EBC45R11+EBC46R13

(22) Nuclear Generation

CIC22R01=EBC44R01
CIC22R06=EBC44R06
CIC22R09=EBC44R11

(23) Other Generation

CIC23R01=EBC47R01+EBC48R01
CIC23R06=EBC47R06+EBC48R06
CIC23R09=EBC47R11+EBC48R13

(24) Electricity

CIC24R09=EBC49R11+EBC49R13
CIC24R11=EBC49R18+EBC49R20+EBC49R23+EBC49R24
+EBC49R26+EBC49R27+EBC49R19+EBC49R21
CIC24R12=EBC49R28
CIC24R14=EBC49R31
CIC24R15=EBC49R32
CIC24R16=EBC49R33
CIC24R17=EBC49R49
CIC24R18=EBC49R52
CIC24R19=EBC49R58

(25) Total of Commercial Energy

CIC25R01=CIC01R01+CIC02R01+CIC14R01+CIC20R01+CIC21R01+CIC22R01+CIC23R01
CIC25R02=CIC01R02+CIC02R02+CIC03R02
CIC25R03=CIC01R03+CIC02R03+CIC03R03+CIC15R03+CIC16R03+CIC17R03
CIC25R04=CIC03R04
CIC25R05=CIC01R05+CIC02R05+CIC03R05
CIC25R06=CIC01R06+CIC02R06+CIC03R06+CIC14R06+CIC15R06+CIC16R06+CIC17R06
CIC25R06=CIC01R06+CIC02R06+CIC03R06+CIC14R06+CIC15R06+CIC16R06+CIC17R06;
+CIC20R06+CIC21R06+CIC22R06+CIC23R06
CIC25R07=CIC02R07+CIC03R07
CIC25R08=CIC03R08+CIC14R08+CIC15R08+CIC16R08+CIC17R08
CIC25R09=CIC01R09+CIC03R09+CIC14R09+CIC20R09+CIC21R09+CIC22R09+CIC23R09+CIC24R09

CIC25R10+CIC01R10+CIC03R10+CIC14R10+CIC18R10+CIC19R10
CIC25R11=CIC01R11+CIC03R11+CIC14R11+CIC18R11+CIC19R11+CIC24R11+CIC02R11
CIC25R12=CIC01R12+CIC02R12+CIC03R12+CIC14R12+CIC18R12+CIC24R12
CIC25R13=CIC01R13+CIC02R13+CIC03R13+CIC14R13+CIC15R13+CIC16R13+CIC17R13;
+CIC18R13+CIC19R13
CIC25R14=CIC01R14+CIC03R14+CIC14R14+CIC17R14+CIC18R14+CIC24R14
CIC25R15=CIC01R15+CIC03R15+CIC14R15+CIC17R15+CIC18R15+CIC24R15
CIC25R16=CIC01R16+CIC03R16+CIC14R16+CIC18R16+CIC24R16
CIC25R17=CIC01R17+CIC03R17+CIC14R17+CIC18R17+CIC24R17
CIC25R18=CIC01R18+CIC03R18+CIC17R18+CIC24R18
CIC25R19=CIC03R19+CIC24R19
CIC25R20=CIC01R20+CIC03R20+CIC14R20+CIC17R20

(26) Non-Commercial Energy

CIC26R01=EBC38R01+EBC39R01+EBC40R01+EBC41R01
CIC26R03=EBC40R03
CIC26R05=EBC38R05+EBC39R05+EBC40R05
CIC26R06=EBC38R06+EBC39R06+EBC40R06+EBC41R06
CIC26R13=EBC38R30+EBC39R30+EBC40R30+EBC41R30
CIC26R14=EBC38R31+EBC39R31+EBC40R31+EBC41R31
CIC26R15=EBC36R32+EBC39R32+EBC40R32+EBC41R32
CIC26R16=EBC38R33+EBC41R33
CIC26R17=EBC38R49+EBC39R49+EBC41R49
CIC26R18=EBC38R52+EBC40R52
CIC26R20=EBC40R59

(27) Grand Total

CIC27R01=CIC25R01+CIC26R01
CIC27R02=CIC25R02
CIC27R03=CIC25R03+CIC26R03
CIC27R04=CIC25R04
CIC27R05=CIC25R05+CIC26R05
CIC27R06=CIC25R06+CIC26R06
CIC27R07=CIC25R07
CIC27R08=CIC25R08
CIC27R09=CIC25R09
CIC27R10=CIC25R10
CIC27R11=CIC25R11
CIC27R12=CIC25R12
CIC27R13=CIC25R13+CIC26R13
CIC27R14=CIC25R14+CIC26R14
CIC27R15=CIC25R15+CIC26R15
CIC27R16=CIC25R16+CIC26R16
CIC27R17=CIC25R17+CIC26R17
CIC27R18=CIC25R18+CIC26R18
CIC27R19=CIC25R19
CIC27R20=CIC25R20+CIC26R20

GENERAL MANUAL OF ENERGY BALANCE TABLE IV

LIST OF ENERGY BALANCE TABLES

1. List of Energy Balance Table (1969–1979)

ENERGY BALANCES IN INDONESIA CA 1969

	1 TOTAL OF COAL C01-C05	2 COKING COAL	3 STEAM COAL	4 ANTHRA-CITE	5 LIGNITE	6 TOTAL OF CRUDE OIL C06-C08	7 ORIGINAL CRUDE OIL	8 REDUCED CRUDE OIL	9 PETROLE-UM PRODUCTS C09-C20	10 DOMESTIC FUEL OIL C19-C20	11 GASOLINE C11-C14	12 AVIATION	13 SUPER	14 PREMIUM	15 JET FUEL	16 KEROSINE	17 DIESEL C17-C19	18 AUTOMOT.	19 INDUSTR.	20 HEAVY FUEL OIL	21 NAPHTHA	22 LOW SUL. WAXY RESIDUE	23 LUBRI-CANTS	24 SOLVENTS
1 DOMESTIC PRODUCTION	0		0	0	NA	54299	54299																	
2 IMPORT	0	0				49	0	47	0	0	0	0	0	0	0	0	0	0	0	0			0	0
3 EXPORT	0		0	0		-37839	-37839		-7168	-2153	-398	0		-388	-386		-206	-201	-3	-1333	0	-4906		-9
4 (INTERNATIONAL BUNKERS)									(-298)	(-298)	(0)	(0)			(0)		(-35)	(-11)	(-24)	(-263)				
5 STOCK CHANGE	0	0	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	0	0	0	0	0	16569	16569	47	-7168	-2153	-398	0	0	-388	-386	0	-206	-201	-3	-1333	0	-4906	0	-9
7 REFINERY						-15220	-15171	-49	14399	10076	2989	38	1	2050	373	2989	1795	1306	488	2981	0	3821	4	38
8 BULKING, LPG)									0															
9 CHEMICAL ENERGY									0												0			
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA						-392	-392							-265	-110	-25	-97				
12 PUMP-UP USE																								
13 AUTO GENERATION	0		0						-164	-164							-164	-38	-86	0				
14 TOWN GAS	0	0	NA						-8	-8						0	-8	-1	-8	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	0	0	0			-15220	-15171	-49	13925	9692	2989	38	1	2050	373	2989	1817	1027	359	2814	0	3821	4	38
18 CRUDE OIL FIELD						0	NA		0	0							0	0	0	0				
19 NATURAL GAS FIELD																								
20 REFINERY						0	0		0	0							0	0	0	0	0	0	0	0
21 GAS PLANT																								
22 CHEMICAL ENERGY PLANT									0												0			
23 PUBLIC UTILITY									0	0							0	0	0	0				
24 TOWN GAS									0	0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	0		NA	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS TICAL DIFFERENCE	0	0	0	0	0	-1287	-1287	0	1818	-16	7	-5	0	12	32	515	-111	-120	-63	-509	0	1686	0	0
31 FINAL CONSUMPTION	0		0	0	0				2475	2383	1788	33	1	1754	180	3504	1920	695	324	972	0		4	38
32 FINAL ENERGY USE	0		0	0	0				2383	2383	1788	33	1	1754	180	3504	1920	695	324	972	0			
33 INDUSTRY	0		0	0	0				222	222							418	214	195	314	0			
34 AGRICULTURE FORESTRY									45	45							38	25	13	7				
35 FISHERY									0	0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0					108	108							108	39	69	0				
37 CONSTRUCTION									0	0							0	0	0	0				
38 MANUFACTURES	0		0	0	0				549	549							242	141	113	307	0			
39 FOODS									151	151							39	28	11	121				
40 TEXTILE									27	27							20	18	3	7				
41 RUBBER									31	31							22	9	13	9				
42 PAPER,PULP									23	23							8	3	4	15				
43 CHEMISTRY(FUEL USE)									3	3							0	0	0	3	NA			
44 CERAMICS,CEMENTS	0		0		NA				144	144							39	7	24	114				
45 IRON,STEEL									0	0							0	0	0	0				
46 NON-FERROUS METALS	0			0					0	0							0	NA	0	0				
47 METAL FABRI.,MACHINERY									0	0							0	0	0	0				
48 SMALL WARES,OTHERS	0		0						189	189							151	93	57	39				
49 RESIDENT.,COMMER.(TOTAL)									3504	3504						3504								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	0		0						2652	2652	1788	33	1	1754	180		349	241	120	515				
53 AIR TRANSPORTATION									133	133	33	33			180		0	0						
54 ROAD TRANSPORTATION									1924	1924	1755		1	1754			149	116	3	0				
55 RAILWAYS	0		0						237	237							50	43	2	169				
56 INTERNAL NAVIGATION									279	279	0			0			135	43	92	144				
57 INTERNATIONAL BUNKER									298	298	0	0			0		35	11	24	263				
58 OTHERS(GOVERN.,FORCES ET)									305	305	0	0	0	0	0		243	234	9	62				
59 NON ENERG. USE IN CHEM.									0												NA			
60 OTHER NON-ENERGY USE	0			0					92														4	38
61 TOTAL USE IN CHEMISTRY									3	3							0	0	0	3	0			

(Unit : 10^3 TCE)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
OTHERS (GREASE, ASPH.,ETC)	PETROLEUM COKE	REFINERY GAS	LPG	NATURAL GAS	NGL (CONDENSATES)	LNG	METHANOL	TOWN GAS	COKE	COKE OVEN GAS	BLAST FURNACE GAS	BRIQUET	WOOD	CHARCOAL	FUEL ETHANOL FROM BIOMASS	AGRICULTURAL WASTES	HYDRO GENERATION PUBLIC UTILITY	HYDRO GENERATION AUTO GENERAT.	NUCLEAR GENERATION	GEOTHERM. GENERAT. PUBLIC UTILITY	GEOTHERM. GENERAT. AUTO GENERAT.	OTHER GENERATION PUBLIC UTILITY	OTHER GENERATION AUTO GENERAT.	TOTAL OF ELECTRICITY	PUBLIC UTILITY	AUTO GENERATION	GRAND TOTAL
				3975									15461	NA	0	17376	513	0	0	0	0	0	0				91622
NA			0						0																		49
-84			-17		0	0	0								0												-45607
																											(-278)
0	NA		0						0			0	NA	NA	0												0
-84	0		-17	3975	0	0	0		0			0	15461	0	0	17376	513	0	0	0	0	0	0				45666
181	0	0	17																								-5120
			0	0	0	0																					0
				0	0		0																				0
				NA													-513		0	0		0		228	228		-582
				0														0			0		0	45	0	45	-118
				0				17	0	0																	11
									0	0																	0
												0															0
181	0	0	17	0	0	0	0	17	0	0		0					-513	0	0	0	0	0	0	274	228	45	-1014
				0																				0	0	0	0
																								0	0	0	0
0	0	0	0	-27																				0	0	0	-27
				0																				0	0	0	0
				0																							0
				0																				0	0	0	0
				0				0																0	NA	0	0
										0																	0
																								0	NA		0
																								0		0	0
0	0	0	0	-1939				-5																-47	-47	0	-1993
0	0	0	0	-1885				-5		0														-47	-47	0	-2020
0	0	0	-2	-1929	0	0	0	0	0	0		0	0	0	0	0											-2240
58	0		0	80			0	14	0			0	15461	0	0	17376								225	179	46	48429
	0		0	40			0	14	0			0	15461	0	0	17376								225	179	46	48198
	0		0	40				0	0			0	9472			18715								79	33	46	21828
													8415			9197								4	NA	4	17761
			NA																								0
																								12	NA	12	120
																								0	NA	0	0
	0		0	40				0	0			0	1257			1419								39	0	39	3318
																								4	NA	4	155
																								3	NA	3	30
																								2	NA	2	33
																								1	NA	1	24
				40																				0	NA	NA	43
				0				0				0	1257			1419								3	NA	3	2022
									0															0	NA	NA	0
	NA																							0	NA	0	0
									0															0	NA	NA	0
			NA	0					0															17	0	17	207
			NA	0				18				0	5725	NA		4161								117	117	NA	15021
			0				0						61		0									0	0		2816
																											133
			0				0								0												1906
													61											0	0		303
																											279
																											258
																								28	28	NA	333
			0	49			0								0												49
58	0																										92
			0	89			0								0									0	0	0	82

ENERGY BALANCES IN INDONESIA CA 1970

	1 TOTAL OF COAL C01-C05	2 COKING COAL	3 STEAM COAL	4 ANTHRA-CITE	5 LIGNITE	6 TOTAL OF CRUDE OIL C06-C08	7 ORIGINAL CRUDE OIL	8 REDUCED CRUDE OIL	9 PETROLE-UM PRODUCTS C09-C28	10 DOMESTIC FUEL OIL C10-C20	11 GASOLINE C11-C14	12 AVIATION	13 SUPER	14 PREMIUM	15 JET FUEL	16 KEROSINE	17 DIESEL C17-C19	18 AUTOMOT.	19 INDUSTR.	20 HEAVY FUEL OIL	21 NAPHTHA	22 LOW SUL. WAXY RESIDUE	23 BITUMI-NOUS	24 SOLVENTS
1 DOMESTIC PRODUCTION	0		0	0	NA	62428	62428																	
2 IMPORT	0	0				532	0	532	0	0	0	0	0	0	0	0	0	0	0	0			0	0
3 EXPORT	0		0	0		-45745	-45745		-7805	-2459	-434	-6		-429	-32		-44	-44	0	-1947	0	-5238		-7
4 INTERNATIONAL BUNKERS									(-410)	(-469)	(0)	(0)			(0)		(-53)	(-14)	(-39)	(-1973)				
5 STOCK CHANGE	0	0	NA	NA	NA	-455	0	-455	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	0	0	0	0	0	16769	16683	77	-7805	-2459	-434	-6	0	-429	-32	0	-44	-44	0	-1947	0	-5238	0	-7
7 REFINERY						-16206	-16129	-77	16619	10984	2343	32	9	2303	193	3052	1935	1298	637	3462	0	5362	4	38
8 NGL(LNG, LPG)									1															
9 CHEMICAL ENERGY									0												0			
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA						-371	-371							-259	-225	-25	-121				
12 POWER USE																								
13 AUTO GENERATION	0		0						-241	-241							-241	-150	-91	0				
14 TOWN GAS	0	0	NA						-8	-8						0	-8	-8	-8	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	0	0	0			-16206	-16129	-77	16000	10354	2343	32	9	2303	193	3052	1435	922	513	3342	0	5362	4	38
18 CRUDE OIL FIELD						0	NA		0	0							0	0	0	0				
19 NATURAL GAS FIELD																								
20 REFINERY						0	0		0	0							0	0	0	0	0	0	0	0
21 NGL PLANT																								
22 CHEMICAL ENERGY PLANT									0												0			
23 PUBLIC UTILITY									0	0							0	0	0	0				
24 TOWN GAS									0	0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	0		NA	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS TICAL DIFFERENCE	0	0	0	0	0	-555	-555	0	-165	18	-16	-1	0	-15	-17	472	-167	-14	-123	-254	0	-124	0	0
31 FINAL CONSUMPTION	0		0	0	0				8069	7923	1893	25	9	1859	143	3523	1225	834	391	1139	0		4	31
32 FINAL ENERGY USE	0		0	0	0				7924	7923	1893	25	9	1859	143	3523	1225	834	391	1139	0			
33 INDUSTRY	0		0	0	0				583	583							516	326	270	387	0			
34 AGRICULTURE FORESTRY									64	64							48	31	17	17				
35 FISHERY									0	0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0					123	123							122	47	75	1				
37 CONSTRUCTION									0	0							0	0	0	0				
38 MANUFACTURING	0		0	0	0				796	796							426	248	178	370	0			
39 FOODS									126	126							29	22	7	97				
40 TEXTILE									45	45							34	27	7	11				
41 RUBBER									50	50							43	29	29	11				
42 PAPER,PULP									29	29							7	3	4	24				
43 CHEMISTRY(NON ENERGY USE)									1	1							0	0	0	1	NA			
44 CERAMICS,CEMENTS	0		0		NA				157	157							31	8	22	127				
45 IRON,STEEL									0	0							0	0	0	0				
46 NON-FERROUS METALS	0			0					0	0							0	NA	0	0				
47 METAL PROD.,MACHINERY									0	0							0	0	0	0				
48 SMALL MANUF.,OTHERS	0		0						387	387							286	118	117	182				
49 RESIDENT.,COMMER.(TOTAL)									3524	3523						3523								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	0		0						3192	3192	1893	25	9	1859	143		436	319	117	721				
53 AIR TRANSPORTATION									169	169	25	25			143		0	0						
54 ROAD TRANSPORTATION									2975	2975	1867		9	1859			268	264	4	0				
55 RAILWAYS	0		0						226	226							54	52	3	171				
56 INTERNAL NAVIGATION									263	263	0			0			121	49	71	142				
57 INTERNATIONAL UPLIFT									455	456	0	0			0		53	14	39	407				
58 OTHERS(GOVERN.,FORCES ET)									224	224	0	0	0	0	0		193	187	4	31				
59 RAW MATERI. USE IN CHEM.									0												NA			
60 OTHER NON-ENERGY USE	0			0					168														4	31
61 TOTAL USE IN CHEMISTRY									1	1							0	0	0	1	0			

(Unit : 10^3 TCE)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
															FUEL ETHANOL FROM BIOMASS		NIBGO GENERATION		NUCLEAR GENERAT-ION	GEOTHERM. GENERAT.		OTHER GENERATION					
OTHERS (GREASE, ASPH.,ET)	PETROLE-UM COKE	REFINERY GAS	LPG	NATURAL GAS	NGL (CONDEN-SATES)	LNG	METHANOL	TOWN GAS	COKE	COKE OVEN GAS	BLAST FURNACE GAS	BRIQUET	WOOD	CHARCOAL		AGRI-CULTURAL WASTES	PUBLIC UTILITY	AUTO GENERAT.		PUBLIC UTILITY	AUTO GENERAT.	PUBLIC UTILITY	AUTO GENERAT.	TOTAL OF ELEC-TRICITY	PUBLIC UTILITY	AUTO GENERAT-ION	GRAND TOTAL
				4114									16778	NA	0	18531	537	0	0	0	0	0	0				102369
																											532
NA			0						0						0												-53550
-89			-11		0	0	0								0												(-469)
																											-455
0	NA		0						0			0	NA	NA	0												
-89	0		-11	4114	0	0	0		0			0	16778	0	0	18531	537	0	0	0	0	0	0				43917
161	49	0	11																								413
			1	-90	0	0																					-87
				0	0		0																				0
																	-537		0	0		0		266	266		-642
				NA																							
				0														0			0		0	68	0	68	-174
				0				17	0	0																	8
									0	0																	0
												0															0
161	49	0	12	-90	0	0	0	17	0	0		0					-537	0	0	0	0	0	0	333	266	68	-483
																								0	0	0	0
				-1347																				0	0	0	-1347
0	0	0	0	-83																				0	0	0	-83
				0																				0	0	0	0
				0																							0
				0																				-6	-6	0	-6
				0				0																0	NA	0	0
										0																	0
																								0	NA		0
																								0		0	0
0	0	0	0	-2431				-3																-64	-64	0	-2459
																								-71	-71	0	-3915
0	0	0	0	-3844				-3		0																	
																											-461
0	0	0	0	-1	0	0	0	0	0	0		0	0	0	0	0											
71	49		1	102			0	14	0			0	16778	0	0	18531								243	195	68	43857
	0		1	91			0	14	0			0	16778	0	0	18531								243	195	68	43850
	0		0	91				0	0			0	10107			11201								103	36	68	22465
													8287			5927								6	NA	6	18784
																											0
			NA																					13	NA	13	136
																								0	NA	0	0
	0		0	91				0	0			0	1239			1374								49	0	49	3549
																								3	NA	3	129
																								4	NA	4	49
																								4	NA	4	55
																								1	NA	1	29
				91																				0	NA	NA	93
				0				0				0	1239			1374								3	NA	3	2771
										0														0	NA	NA	0
	NA																							0	NA	0	0
										0														0	NA	NA	0
			NA	0						0														33	0	33	420
			1	0				14				0	8615	NA		7331								125	125	NA	17459
			0				0						54		0									0	0		3219
																											169
			0				0								0												2975
													54											0	0		282
																											263
																											110
																								34	34	NA	258
			0	91			0								0												91
																											166
71	49																										
			0	102			0								0									0	0	0	101

ENERGY BALANCES IN INDONESIA CA 1976

	1 TOTAL OF COAL C05-C03	2 COKING COAL	3 STEAM COAL	4 ANTHRA-CITE	5 LIGNITE	6 TOTAL OF CRUDE OIL C06-C08	7 ORIGINAL CRUDE OIL	8 REDUCED CRUDE OIL	9 PETROLE-UM PRODUCTS C09-C20	10 DOMESTIC FUEL OIL C10-C20	11 GASOLINE C11-C14	12 AVIATION	13 SUPER	14 PREMIUM	15 JET FUEL	16 KEROSINE	17 DIESEL C17-C19	18 AUTOMOB.	19 INDUSTR.	20 HEAVY FUEL OIL	21 NAPHTHA	22 LOW SUL. WAXY RESIDUE	23 LUBRI-CANTS	24 SOLVENTS
1 DOMESTIC PRODUCTION	884		884	0	NA	65269	65269																	
2 IMPORT	0	0				570	0	570	1329	1329	1	1	0	0	0	1042	19	18	0	255			0	0
3 EXPORT	0		0	0		-48013	-48013		-7539	-1245	-59	-2		-57	0		0	0	0	-1165	0	-6184		0
4 (INTERNATIONAL BUNKERS)									(-337)	(-337)	(0)	(0)			(0)		(-75)	(-5)	(-70)	(-282)				
5 STOCK CHANGE	-48	0	-48	NA	NA	69	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	136	0	136	0	0	17086	17247	639	-6210	81	-58	-1	0	-57	0	1042	19	18	0	-931	0	-6184	0	0
7 REFINERY						-18710	-18076	-634	17389	11061	2426	37	22	2366	216	3859	2222	1556	665	3175	0	6923	3	15
8 NGL(LNG, LPG)									0															
9 CHEMICAL ENERGY									0												0			
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA						-414	+414							-269	-221	-39	-154				
12 PGSP-OP USE																								
13 AUTO GENERATION	-46		-46						-292	-292							-292	-193	-99	0				
14 TOWN GAS	0	0	NA						-13	-13						0	-13	-1	-12	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	-46	0	-46			-18710	-18076	-634	16661	10370	2426	37	22	2366	216	3859	1957	1340	517	3021	0	6923	3	15
18 CRUDE OIL FIELD						0	NA		0	0							0	0	0	0				
19 NATURAL GAS FIELD																								
20 REFINERY						0	0		0	0							0	0	0	0	0	0	0	0
21 NGL PLANT																								
22 CHEMICAL ENERGY PLANT									0												0			
23 PUBLIC UTILITY									0	0							0	0	0	0				
24 TOWN GAS									0	0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	-23		-23	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	-23	0	-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS TICAL DIFFERENCE	47	0	47	0	0	824	827	-5	-1608	-1768	-348	-12	+3	-291	-24	-298	-173	-83	-19	-1058	0	161	0	0
31 FINAL CONSUMPTION	94		94	0	0				8842	8686	2062	24	19	2019	192	3995	1494	1047	427	1032	0		3	15
32 FINAL ENERGY USE	94		94	0	0				8842	8686	2062	24	19	2019	192	3995	1494	1047	427	1032	0			
33 INDUSTRY	59		59	0	0				1153	1153							212	420	293	448	0			
34 AGRICULTURE FORESTRY									81	81							51	31	20	27				
35 FISHERY									0	0							0	0						
36 MINING(ENERGY SEC.)	0		0	0					131	131							131	47	81	0				
37 CONSTRUCTION									0	0							0	0	0	0				
38 MANUFACTURING	59		59	0	0				942	942							528	335	191	414	0			
39 FOODS									163	163							48	30	14	118				
40 TEXTILE									79	79							59	36	23	19				
41 RUBBER									57	57							45	27	18	12				
42 PAPER,PULP									43	43							12	4	8	27				
43 CHEMISTRY(NON ENERGY USE)									4	4							0	0	0	4	NA			
44 CERAMICS,CEMENTS	45		45		NA				193	193							41	11	39	152				
45 IRON,STEEL									0	0							0	0	0	0				
46 NON-FERROUS METALS	0			0					0	0							0	NA	0	0				
47 METAL PROD.,MACHINERY									0	0							0	0	0	0				
48 SMALL MINES,OTHERS	1		1						436	435							325	229	96	81				
49 RESIDENT.,COMMER.(TOTAL)									3908	3905						3905								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	45		45						3380	3380	2062	24	19	2019	192		579	450	120	547				
53 AIR TRANSPORTATION									216	216	24	24			192		0	0						
54 ROAD TRANSPORTATION									2324	2321	2038		19	2019			282	278	4	0				
55 RAILWAYS	45		45						233	233							54	52	2	179				
56 INTERNAL NAVIGATION									273	273	0			0			168	115	53	105				
57 INTERNATIONAL BUNKER									337	337	0	0			0		75	5	70	262				
58 OTHERS(GOVERN.,FORCES ?)									247	247	0	0	0	0	0		203	197	6	44				
59 NON NATERG. USE IN CHEM.									0												NA			
60 OTHER NON-ENERGY USE	0			0					154														3	15
61 TOTAL USE IN CHEMISTRY									4	4							0	0	0	4	0			

(Unit : 10^3 TCE)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
																	HYDRO GENERATION			GEOTHERM. GENERAT.		OTHER GENERATION					
OTHERS (GREASE, ASPH.,BI	PETROLE-UM COKE	REFINERY GAS	LPG	NATURAL GAS	KSL (CONDEN-SATES)	LNG	METHANOL	TOWN GAS	COKE	COKE OVEN GAS	BLAST FURNACE GAS	BRIQUET	WOOD	CHARCOAL	FUEL ETHANOL FROM BIOMASS	AGRI-CULTURAL WASTES	PUBLIC UTILITY	AUTO GENERAT.	NUCLEAR GENERAT-ION	PUBLIC UTILITY	AUTO GENERAT.	PUBLIC UTILITY	AUTO GENERAT.	TOTAL OF ELEC-TRICITY	PUBLIC UTILITY	AUTO GENERAT-ION	GRAND TOTAL
				4592									19255	NA	0	18321	619	0	0	0	0	0	0				108231
NA			0						0						0												1899
-102			-8		0	0	0																				-55552
												0	NA	NA	0												(-3372
0	NA		0						0																		22
-102	0		-8	4592	0	0	0		0			0	19255	0	0	18321	619	0	0	0	0	0	0				54559
186	52	0	12																								-1339
			0	-364	0	0																					-164
				0	0		0																				0
																	-619		0	0		0		287	287		-746
				NA																							
				0														0			0		0	100	0	100	-258
				0				18	0	0																	5
									0	0																	0
												0															0
186	52	0	12	-364	0	0	0	18	0	0		0					-619	0	0	0	0	0	0	388	287	100	-2492
																								0	0	0	0
				-1315																				0	0	0	-1315
0	0	0	0	-16																				0	0	0	-46
				0																				0	0	0	0
				0																							0
				0																				-8	-8	0	-8
				0				0																0	NA	0	0
				0						0																	0
																								0	NA		0
																								-19		-19	-41
0	0	0	0	-2969				-3																-60	-60	0	-2972
																								-87	-68	-19	-4102
0	0	0	0	-1269				-3		0																	
																											-237
0	0	0	-3	-1	0	0	0	0	0	0		0	0	0	0	0											
																								301	219	82	45988
84	52		3	159			0	15	0			0	19255	0	0	18321											
																								301	219	82	48735
	0		3	79			0	15	0			0	19255	0	0	18321											
																								119	39	82	22912
	0		0	79				0	0			0	11911			10439								6	NA	6	18518
													9501			1059											0
			NA																					14	NA	14	145
																								0	NA	0	0
																								61	0	61	1382
	0		0	77				0	0			0	1518			1449								5	NA	5	969
																								7	NA	7	86
																								5	NA	5	62
																								1	NA	1	41
																								0	NA	NA	84
				29																				1	NA	1	3192
				0				0				0	1510			1449								0	NA	NA	0
										0														0	NA	0	0
	NA									0														0	NA	NA	0
										0														39	0	39	449
			NA	0																							
			3	0				15				0	8203	NA		7922								141	141	NA	20069
			0				0						43		0									0	0		3156
																											216
															0												2321
			0				0						41											0	0		319
																											273
																											337
																								41	41	NA	268
																											29
			0	29			0								0												
																											154
84	52																										
			0	159			0								0									0	0	0	163

ENERGY BALANCES IN INDONESIA CA 1972

	1 TOTAL OF COAL C01-C05	2 COKING COAL	3 STEAM COAL	4 ANTHRA-CITE	5 LIGNITE	6 TOTAL OF CRUDE OIL C06-C08	7 ORIGINAL CRUDE OIL	8 REDUCED CRUDE OIL	9 PETROLE-UM PRODUCTS C09-C28	10 DOMESTIC FUEL OIL C10-E20	11 GASOLINE C11-C14	12 AVIATION	13 SUPER	14 FOREIGN	15 JET FUEL	16 KEROSINE	17 DIESEL C17-C19	18 AUTOMOT.	19 INDUSTR.	20 HEAVY FUEL OIL	21 NAPHTHA	22 LOW SUL. WAXY RESIDUE	23 LUBRI-CANTS	24 SOLVENTS
1 DOMESTIC PRODUCTION	167		167	0	NA	79270	79270																	
2 IMPORT	12	12				162	0	162	1964	6922	0	0	0	0	15	510	0	0	0	8398			9	0
3 EXPORT	0		0	0		-58747	-58747		-9791	-291	0	0		0	0		0	0	0	-291	0	-8930		0
4 INTERNATIONAL BUNKERS									(-220)	(-220)	(0)	(0)			(0)		(0)	(0)	(0)	(-220)				
5 STOCK CHANGE	17	0	15	2	NA	180	0	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	196	12	182	2	0	20585	20323	262	-7836	1131	0	0	0	0	15	510	0	0	0	697	0	-8908	9	0
7 REFINERY						-20385	-20123	-262	19957	10366	2183	23	40	2119	248	3147	2761	1720	1041	2927	363	8933	7	28
8 BOL(CRS, LPG)									0															
9 CHEMICAL ENERGY									0												0			
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA						-355	-355							-253	-199	-56	-102				
12 PERP-GP USE																								
13 AUTO GENERATION	-69		-69						-325	-325							-325	-220	-105	0				
14 TOWN GAS	-12	-12	NA						-17	-17						0	-17	-1	-17	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	-81	-12	-69			-20385	-20123	-262	19268	9869	2183	23	40	2119	248	3147	2166	1304	866	1925	363	8933	7	28
18 CRUDE OIL FIELD						0	NA		0	0							0	0	0	0				
19 NATURAL GAS FIELD																								
20 REFINERY						0	0		0	0							0	0	0	0	0	0	0	0
21 BOL PLANT																								
22 CHEMICAL ENERGY PLANT									0												0			
23 PUBLIC UTILITY									0	0							0	0	0	0				
24 TOWN GAS									0	0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	-126		-126	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	-126	0	-126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATES VISCAL DIFFERENCE	93	0	93	0	0	-260	-200	0	-1547	-1152	-40	-2	-5	-57	-11	593	-252	216	-467	-1422	-363	-34	0	0
31 FINAL CONSUMPTION	81		79	2	0				9884	9847	2122	22	38	2062	252	4249	1914	1515	399	1110	0		16	28
32 FINAL ENERGY USE	79		79	0	0				9654	9847	2122	22	38	2062	252	4249	1914	1515	399	1110	0			
33 INDUSTRY	51		51	0	0				1453	1453							790	478	310	665	0			
34 AGRICULTURE FORESTRY									84	84							61	45	16	23				
35 FISHERY									0	0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0					135	135							132	54	77	4				
37 CONSTRUCTION									0	0							0	0	0	0				
38 MANUFACTURING	51		51	0	0				1234	1234							596	377	216	638	0			
39 FOODS									178	178							61	15	18	104				
40 TEXTILE									145	145							103	47	51	41				
41 RUBBER									75	75							56	33	23	19				
42 PAPER,PULP									50	50							15	8	6	35				
43 CHEMISTRY(FUEL USE)									95	95							7	7	0	88	NA			
44 CERAMICS,CEMENTS	47		47		NA				316	316							41	16	50	254				
45 IRON,STEEL									13	13							5	5	1	8				
46 NON-FERROUS METALS	0			0					0	0							0	NA	0	0				
47 METAL FABRI.,MACHINERY									0	0							6	0	0	0				
48 SPALL MANUF.,OTHERS	4		4						342	342							288	221	63	78				
49 RESIDENT.,COMMER.(TOTAL)									4256	4249						4249								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	28		28						3449	3459	2122	22	38	2062	252		933	817	66	382				
53 AIR TRANSPORTATION									274	274	22	22			252		0	0						
54 ROAD TRANSPORTATION									2706	2706	2100		38	2062			605	481	4	0				
55 RAILWAYS	28		28						198	198							46	45	1	151				
56 INTERNAL NAVIGATION									293	293	0			0			202	221	49	10				
57 INTERNATIONAL BUNKER									220	220	0	0			0		0	0	0	220				
58 OTHERSECTOR.,FORCES ET									256	256	0	0	0	0	0		193	170	23	63				
59 NON NATERT. USE IN CHEM.									0												NA			
60 OTHER NON-ENERGY USE	2			2					231														16	28
61 TOTAL USE IN CHEMISTRY									95	95							7	7	0	88	0			

(Unit : 10^3 TCE)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
																	WOOD GENERATION										
OTHERS (GREASE, ASFH.,ET	PETROLE-UM COKE	REFINERY GAS	LPG	NATURAL GAS	NGL (CONDEN-SATES)	LNG	METHANOL	TOWN GAS	COKE	COKE OVEN GAS	BLAST FURNACE GAS	BRIQUET	WOOD	CHARCOAL	FUEL ETHANOL FROM BIOMASS	AGRI-CULTURAL WASTES	PUBLIC UTILITY	AUTO GENERAT.	NUCLEAR GENERAT-ION	GEOTHERM. PUBLIC UTILITY	GEOTHERM. AUTO GENERAT.	OTHER GENERATION PUBLIC UTILITY	OTHER GENERATION AUTO GENERAT.	TOTAL OF ELEC-TRICITY	PUBLIC UTILITY	AUTO GENERAT-ION	GRAND TOTAL
				5714									26819	NA	0	17172	567	0	0	0	0	0	0				123710
33			0						0																		2138
-96			-1		0	0	0								0												-69738
																											(-220)
0	NA		0						0			0	NA	NA	0												117
-63	0		-1	5714	0	0	0		0			0	26819	0	0	17172	567	0	0	0	0	0	0				52217
196	54	0	10																								-428
			0	-253	0	0																					-253
				0	0		0																				0
				NA													-567		0	0		0		389	389		-612
				0														0			0		0	110	0	110	-283
				0				21	0	0																	-8
									0	0																	0
												0															0
196	54	0	10	-253	0	0	0	21	0	0		0					-567	0	0	0	0	0	0	420	389	110	-1565
																								0	0	0	0
				-1169																				0	0	0	-1169
0	0	0	0	-39																				0	0	0	-39
				0																				0	0	0	-0
				0																							0
				0																				-9	-9	0	-9
				0				0																0	NA	0	0
										0																	0
																								0	NA		0
																								-19		-19	-146
0	0	0	0	-3191				-5																-68	-68	0	-3973
0	0	0	0	-5109				-5		0														-76	-77	-19	-5337
0	0	0	0	-18	0	0	0	0	0	0		0	0	0	0	0											-1874
133	54		6	334			0	16	0			0	26819	0	0	17172								323	233	91	48630
	0		6	167			0	16	0			0	26819	0	0	17172								323	233	91	49231
	0		0	167				0	0			0	18883			8965								129	38	91	21669
													8970			7495								7	NA	7	16456
			NA																								0
																								14	NA	14	450
																								0	NA	0	0
	0		0	167				0	0			0	1918			1569								49	0	49	5015
																								8	NA	8	185
																								11	NA	11	154
																								6	NA	6	81
																								2	NA	2	52
				167																				1	NA	1	263
				0				0				0	1918			1569								6	NA	6	3563
									0															1	NA	1	14
	NA																							0	NA	0	0
									0															0	NA	NA	0
			NA	0					0															34	0	34	401
			6	0				16				0	9117	NA		8187								154	151	NA	22527
			0				0						19		0									0	0		3736
																											274
			0				0								0												2786
													19											0	0		244
																											293
																											220
																								43	43	NA	299
			0	167			0								0												167
133	54																										232
			0	334			0								0									1	0	1	430

ENERGY BALANCES IN INDONESIA CA 1973

	1 TOTAL OF COAL C01-C05	2 COKING COAL	3 STEAM COAL	4 ANTHRA-CITE	5 LIGNITE	6 TOTAL OF CRUDE OIL C06-C08	7 ORIGINAL CRUDE OIL	8 REDUCED CRUDE OIL	9 PETROLE-UM PRODUCTS C09-C20	10 DOMESTIC FUEL OIL C10-C20	11 GASOLINE C11-C14	12 AVIATION	13 SUPER	14 PREMIUM	15 JET FUEL	16 KEROSINE	17 DIESEL C17-C19	18 ANTIDOST.	19 INDUSTR.	20 HEAVY FUEL OIL	21 NAPHTHA	22 LOW SUL. WAXY RESIDUE	23 LUBRE-CANTS	24 SOLVENTS
1 DOMESTIC PRODUCTION	141		137	4	NA	97903	97903																	
2 IMPORT	3	3				220	0	220	2565	2539	0	0	0	0	161	409	331	331	0	1647			10	2
3 EXPORT	0		0	0		-74956	-74956		-12310	-70	0	0		0	0		0	0	0	-70	0	-12115		0
4 (INTERNATIONAL BUNKERS)									(-249)	(-249)	(0)	(0)			(0)		(0)	(0)	(0)	(-249)				
5 STOCK CHANGE	32	0	32	NA	NA	201	0	201	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	175	3	169	4	0	24271	23846	425	-9755	2469	0	0	0	0	161	409	331	331	0	1577	0	-12115	10	2
7 REFINERY						-24203	-23778	-425	23209	10626	2462	6	23	2383	202	4003	3195	2328	871	784	203	12030	7	34
8 NGL(LPG, LPG)									0															
9 CHEMICAL ENERGY									0												0			
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA						-447	-447							-332	-266	-65	-115				
12 PUMP-UP GSE																								
13 ASID GENERATION	-45		-45						-422	-422							-422	-295	-127	0				
14 TOWN GAS	-3	-3	NA						-21	-21						0	-21	-5	-20	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	-48	-3	-45			-24203	-23778	-425	22319	9736	2462	6	23	2383	202	4003	2421	1762	659	669	203	12030	7	34
18 CRUDE OIL FIELD						0	NA		0	0							0	0	0	0				
19 NATURAL GAS FIELD																								
20 REFINERY						0	0		0	0							0	0	0	0	0	0	0	0
21 NGL PLANT																								
22 CHEMICAL ENERGY PLANT									0												0			
23 PUBLIC UTILITY									0	0							0	0	0	0				
24 TOWN GAS									0	0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	-13		-13	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	-13	0	-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS TICAL DIFFERENCE	-32	0	-31	-1	0	-48	-68	0	-1107	-918	-117	-2	-3	-188	-14	357	-239	-65	-174	-975	-203	85	0	0
31 FINAL CONSUMPTION	83		83	3	0				11457	11218	2345	4	20	2272	348	4759	2513	2028	484	1252	0		17	36
32 FINAL ENERGY USE	80		80	0	0				11232	11218	2345	4	20	2272	348	4759	2513	2028	484	1252	0			
33 INDUSTRY	43		43	0	0				1767	1767							1017	640	376	750	0			
34 AGRICULTURE FORESTRY									165	165							79	60	20	26				
35 FISHERY									0	0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0					171	171							167	73	94	4				
37 CONSTRUCTION									0	0							0	0	0	0				
38 MANUFACTURING	43		43	0	0				1431	1431							771	548	263	720	0			
39 FOODS									212	212							84	82	22	128				
40 TEXTILE									178	178							132	65	66	47				
41 RUBBER									93	93							73	44	29	21				
42 PAPER,PULP									59	59							19	11	8	41				
43 CHEMISRY(FUEL USE)									169	169							10	9	0	99	NA			
44 CERAMICS,CEMENTS	38		38		NA				363	363							75	14	61	288				
45 IRON,STEEL									16	16							7	6	1	9				
46 NON-FERROUS METALS	0			0					0	0							0	NA	0	0				
47 METAL PROD.,MACHINERY									0	0							0	0	0	0				
48 SMALL MANUF.,OTHERS	5		5						460	460							372	295	77	88				
49 RESIDENT.,COMMER.(TOTAL)									4774	4759						4759								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	37		37						4065	4015	2414	4	69	1923	348		1240	1160	80	431				
53 AIR TRANSPORTATION									352	352	4	4			348		0	0						
54 ROAD TRANSPORTATION									2851	2851	2412		69	1923			839	814	5	0				
55 RAILWAYS	37		37						232	232							82	69	2	171				
56 INTERNAL NAVIGATION									382	382	0			0			370	294	23	12				
57 INTERNATIONAL BUNKERS									248	248	0	0			0		0	0	0	248				
58 OTHERS(GOVERN.,FORCES 3)									627	627	388	0	1	219	0		256	228	28	71				
59 NON MATERI. USE IN CHEM.									0												NA			
60 OTHER NON-ENERGY USE	3			3					235														17	36
61 TOTAL USE IN CHEMISTRY									189	189							10	9	0	99	0			

(Unit : 10^3 TCE)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
																	HYDRO GENERATION			GEOTHERM. GENERAT.		OTHER GENERATION					
OTHERS (GREASE, ASFH.,ET)	PETROLE-UM COKE	REFINERY GAS	LPG	NATURAL GAS	KSL (CONDEN-SATES)	LNG	METHANOL	TOWN GAS	COKE	COKE OVEN GAS	BLAST FURNACE GAS	BRIQUET	WOOD	CHARCOAL	FUEL ETHANOL FROM BIOMASS	AGRI-CULTURAL WASTES	PUBLIC UTILITY	AUTO GENERAT.	NUCLEAR GENERAT-ION	PUBLIC UTILITY	AUTO GENERAT.	PUBLIC UTILITY	AUTO GENERAT.	TOTAL OF ELEC-TRICITY	PUBLIC UTILITY	AUTO GENERAT-ION	GRAND TOTAL
				7055									23954	NA	0	20130	608	0	0	0	0	0	0				143893
14			0						0																		2788
-125			-1		0	0	0								0												-86367
																											(-2481
0	NA		0						0			0	NA	NA	0												236
-111	0		-1	7055	0	0	0		0			0	23954	0	0	20130	608	0	0	0	0	0	0				65538
287	16	0	15																								-894
			0	-273	0	0																					-273
				0	0		0																				0
				NA													-698		0	0		0		364	364		-698
				0				22	0	0								0			0		0	131	0	131	-336
				0					0	0																	-2
												0															0
																											0
287	16	0	15	-273	0	0	0	22	0	0		0					-698	0	0	0	0	0	0	131	364	131	-2276
																								0	0	0	0
				-1491																				0	0	0	-1491
0	0	0	0	-68																				0	0	0	+65
				0																				0	0	0	0
				0																							0
				0																				-10	-10	0	-10
				0				0																0	NA	0	0
										0																	0
																								0	NA		0
																								-13		-13	-26
0	0	0	0	-5035				-6																-86	-86	0	-5126
0	0	0	0	-6550				-6		0														-109	-96	-13	-8718
0	0	0	0	143	0	0	0	0	0	0		0	0	0	0	0											-1044
135	16		16	334			0	16	0			0	23654	0	0	20130								355	287	118	55470
	0		16	167			0	16	0			0	23654	0	0	20130								355	287	118	55065
	0		0	167				0	0			0	12376			10809								184	66	118	25344
													10748			9387								10	NA	10	24252
			NA																								0
																								18	NA	18	189
																								0	NA	0	0
	0		0	167				0	0			0	1827			1421								90	0	90	4839
																								10	NA	10	222
																								15	NA	15	593
																								8	NA	8	102
																								2	NA	2	61
				167																				1	NA	1	277
				0				0				0	1827			1421								8	NA	8	3458
									0															1	NA	1	18
	NA																							0	NA	0	0
									0															0	NA	NA	0
			NA	0					0															45	0	45	510
			16	0				16				0	10673	NA		9322								165	165	NA	24550
			0				0						5		0									0	0		4108
																											352
			0				0								0												2651
													5											0	0		275
																											392
																											218
																								34	34	NA	683
			0	167			0								0												167
135	16																										238
			0	334			0								0									1	0	1	444

ENERGY BALANCES IN INDONESIA CA 1974

	1 TOTAL OF COAL C01-C05	2 COAKING COAL	3 STEAM COAL	4 ANTHRA-CITE	5 LIGNITE	6 TOTAL OF CRUDE OIL C06-C08	7 ORIGINAL CRUDE OIL	8 REDUCED CRUDE OIL	9 PETROLE-UM PRODUCTS C09-C20	10 DOMESTIC FUEL OIL C10-C20	11 GASOLINE C11-C14	12 AVIATION	13 SUPER	14 PREMIUM	15 JET FUEL	16 KEROSINE	17 DIESEL C17-C19	18 AUTOMOT.	19 INDUSTR.	20 HEAVY FUEL OIL	21 NAPHTHA	22 LOW SUL. WAXY RESIDUE	23 LUBRI-CANTS	24 SOLVENTS
1 DOMESTIC PRODUCTION	148		148	9	NA	100568	100568																16	4
2 IMPORT	1	1				195	0	195	2843	2769	0	0	0	0	212	1156	458	458	0	943				0
3 EXPORT	0		0	0		-75933	-75933		-1922	-522	-522	0		-522	0		0	0	0	0	0	-9384		
4 (INTERNATIONAL BUNKERS)									(-4573	(-4573	(-23	(-23			(-1143		(-38	(-13	(-373	(-3659				
5 STOCK CHANGE	-7	0	-7	NA	NA	-1550	-1388	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	142	1	133	9	0	23280	23048	232	-7149	2246	-522	0	0	-522	212	1156	458	458	0	943	0	-9384	16	4
7 REFINERY						-24087	-23855	-232	23885	12775	2468	27	88	2352	285	4335	3857	2878	971	1818	845	9871	6	30
8 BOILERS, LPG)									4												0			
9 CHEMICAL ENERGY									0															
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA						-462	-462							-367	-296	-71	-95				
12 PGBP-OF USE																								
13 AUTO GENERATION	-57		-57						-324	-324							-324	-185	-138	0				
14 TOWN GAS	-1	-1	NA						-23	-23						0	-23	-1	-22	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	-58	-1	-57			-24087	-23855	-232	23081	11865	2468	27	88	2352	285	4335	3154	2418	740	1723	845	9871	6	30
18 CRUDE OIL FIELD						-565	-565		0	0							0	0	0	0				
19 NATURAL GAS FIELD						0	0		0	0							0	0	0	0	0	0	0	0
20 REFINERY																					0			
21 NGL PLANT									0															
22 CHEMICAL ENERGY PLANT									0	0							0	0	0	0				
23 PUBLIC UTILITY									0	0							0	0	0					
24 TOWN GAS																								
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	-10		-10	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	-10	0	-10	0	0	-565	-565	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS TICAL DIFFERENCE	0	0	9	-1	0	1312	1312	0	-2642	-1229	244	-2	7	693	-45	8	-587	-391	-196	-1327	-816	-557	0	0
31 FINAL CONSUMPTION	82		75	7	0				13365	12183	2659	26	95	2529	451	5499	3024	2459	543	1359	0		22	34
32 FINAL ENERGY USE	25		75	0	0				13014	12183	2659	26	95	2529	451	5499	3024	2459	543	1359	0			
33 INDUSTRY	43		43	0	0				1668	1668							813	493	410	856	0			
34 AGRICULTURE FORESTRY									149	149							115	99	24	35				
35 FISHERY									0	0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0					231	231							172	81	91	59				
37 CONSTRUCTION									5	5							5	0	5	0				
38 MANUFACTURING	43		43	0	0				1283	1283							521	232	299	762	0			
39 FOODS									229	229							82	47	35	147				
40 TEXTILE									260	260							201	85	115	59				
41 RUBBER									94	94							22	45	28	21				
42 PAPER,PULP									69	69							22	12	9	38				
43 CHEMISTRY(EXCL USE)									175	175							19	16	3	156	NA			
44 CERAMICS,CEMENTS	37		37		NA				423	423							94	20	74	329				
45 IRON,STEEL									38	38							26	6	20	11				
46 NON-FERROUS METALS	0			0					0	0							0	NA	0	0				
47 METAL FABRI.,MACHINERY									2	2							2	0	2	0				
48 SMALL BASES,OTHERS	5		5						3	3							3	0	3	0				
49 RESIDENT.,COMMER.(TOTAL)									5531	5499						5499								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	32		32						5234	5234	2345	19	95	2251	419		2492	1880	121	418				
53 AIR TRANSPORTATION									322	322	17	17			366		0	0						
54 ROAD TRANSPORTATION									3691	3691	2345		95	2251			1545	1526	19	0				
55 RAILWAYS	32		32						165	165							55	54	1	138				
56 INTERNAL NAVIGATION									377	377	1			1			363	359	43	13				
57 INTERNATIONAL BUNKER									459	459	2	2			114		38	1	37	345				
58 OTHERS(GOVERN.,FORCES ET)									582	582	285	2	0	278	32		269	197	72	55				
59 RAW MATERI. USE IN CHEM.									0												NA			
60 OTHER NON-ENERGY USE	7			7					291														22	34
61 TOTAL USE IN CHEMISTRY									975	975							19	16	3	156	0			

(Unit : 10^3 TCE)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
																	Other Generation										
Others (Grease, Asph.,Ø)	Petroleum Coke	Refinery Gas	LPG	Natural Gas	NGL (Condensates)	LNG	Methanol	Town Gas	Coke	Coke Oven Gas	Blast Furnace Gas	Briquet	Wood	Charcoal	Fuel Ethanol from Biomass	Agricultural Wastes	Public Utility	Auto Generat.	Nuclear Generation	Geothermal Generat. Public Utility	Geothermal Generat. Auto Generat.	Other Generation Public Utility	Other Generation Auto Generat.	Total of Electricity	Public Utility	Auto Generation	Grand Total
				7276									25198	NA	0	19290	802	0	0	0	0	0	0				153283
50			0						0																		3035
-142			-5		0	0	0								0												-85995
																											(-459)
0	NA		0						0			0	NA	NA	0												-1558
-91	0		-5	7276	0	0	0		0			0	25198	0	0	19290	802	0	0	0	0	0	0				68839
283	43	0	32																								-202
			4	-269	0	0																					-265
				0	0		0																				0
				NA													-802		0	0		0		403	403		-861
				0														0			0		0	107	0	107	-274
				0				22	0	0																	-2
									0	0																	0
												0															0
283	43	0	36	-269	0	0	0	-22	0	0		0					-802	0	0	0	0	0	0	510	403	107	-1604
																								0	0	0	-505
				-1897																				0	0	0	-1897
0	0	0	0	-220																				0	0	0	-220
				0																				0	0	0	0
				0																							0
				0																				-12	-12	0	-12
				0				0																0	NA	0	0
										0																	0
																								0	NA		0
																								-16		-16	-26
0	0	0	0	-4542				-6																-100	-100	0	-4648
0	0	0	0	-6849				-8		0														-127	-111	-16	-7298
0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0											-1322
191	43		32	358			0	15	0			0	25198	0	0	19299								383	292	91	58631
	0		32	191			0	15	0			0	25198	0	0	19299								383	292	91	58186
	0		0	190				0	0			0	12389			9418								179	88	91	23557
													10213			7872								14	NA	14	18198
			NA																								0
																								19	NA	19	250
																								0	NA	0	5
	0		0	190				0	0			0	2176			1667								57	0	57	5416
																								9	NA	9	238
																								22	NA	22	282
																								8	NA	8	102
																								2	NA	2	63
				167																				2	NA	2	344
				23				0				0	2176			1667								18	NA	18	4336
									0															3	NA	3	40
	NA																							0	NA	0	0
									0															0	NA	NA	2
			NA	0					0															0	0	NA	8
			32	1				15				0	12398	NA		9892								176	176	NA	28322
			0				0						11		0									0	0		5277
																											322
			0				0						11		0									0	0		3891
																											229
																											377
																											459
																								28	28	NA	610
			0	167			0								0												167
191	43																										298
			0	334			0								0									2	0	2	512

ENERGY BALANCES IN INDONESIA CA 1975

	1 TOTAL OF COAL C01-C05	2 COKING COAL	3 STEAM COAL	4 ANTHRA-CITE	5 LIGNITE	6 TOTAL OF CRUDE OIL C06-C08	7 ORIGINAL CRUDE OIL	8 REDUCED CRUDE OIL	9 PETROLE-UM PRODUCTS C09-C20	10 DOMESTIC FUEL OIL C18-C20	11 GASOLINE C11-C14	12 AVIATION	13 SUPER	14 PREMIUM	15 JET FUEL	16 KEROSENE	17 DIESEL C17-C19	18 AUTOMOT.	19 INDUSTR.	20 HEAVY FUEL OIL	21 NAPHTHA	22 LOW SUL. WAXY RESIDUE	23 LUBRI-CANTS	24 SOLVENTS
1 DOMESTIC PRODUCTION	192		183	9	NA	95562	95562																	
2 IMPORT	6	6				922	0	122	2795	2726	0	0	0	0	487	1278	945	945	0	36			14	7
3 EXPORT	0		0	0		-72759	-72759		-8843	-227	-227	0		-227	0		0	0	0	0	-227	-7347		0
4 (INTERNATIONAL BUNKERS)									(-417)	(-417)	(-33)	(-33)			(-1355)		(-45)	(-73)	(-383)	(-234)				
5 STOCK CHANGE	-3	0	-3	NA	NA	-356	-351	-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	194	6	180	9	0	22568	22452	116	-6062	1998	-227	0	0	-227	487	1278	945	945	0	36	-227	-7347	14	7
7 REFINERY						-21713	-21596	-116	21352	12893	2881	33	121	2847	189	4350	4037	3909	1828	1605	820	7380	7	28
8 BOILERS, LPG)									3															
9 CHEMICAL ENERGY									0												0			
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA						-889	-889							-463	-396	-66	-345				
12 POWER USE																								
13 AUXI GENERATION	-77		-77						-491	-491							-491	-227	-274	0				
14 TOWN GAS	-6	-6	NA						-21	-21						0	-21	-1	-19	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	-83	-6	-77			-21713	-21596	-116	20126	11643	2881	33	121	2847	189	4350	3153	2381	769	1259	820	7380	7	28
18 CRUDE OIL FIELD						-505	-505		0	0							0	0	0	0				
19 NATURAL GAS FIELD						0	0		0	0							0	0	0	0	0	0	0	0
20 REFINERY																								
21 GAS PLANT									0												0			
22 CHEMICAL ENERGY PLANT									0	0							0	0	0	0				
23 PUBLIC UTILITY									0	0							0	0	0					
24 TOWN GAS																								
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	-7		-7	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	-7	0	-7	0	0	-505	-505	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS TICAL DIFFERENCE	-5	0	-4	-1	0	-350	-350	0	947	1072	842	-7	5	844	-25	514	-283	-193	-89	-56	-93	-33	0	0
31 FINAL CONSUMPTION	99		92	7	0				15025	14733	2915	25	126	2783	542	6222	3815	3135	679	1239	0		21	36
32 FINAL ENERGY USE	92		92	0	0				14781	14733	2915	25	126	2783	542	6222	3815	3135	679	1239	0			
33 INDUSTRY	45		45	0	0				1831	1831							1609	474	514	823	0			
34 AGRICULTURE FORESTRY									156	156							123	101	22	33				
35 FISHERY									0	0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0					162	162							161	85	76	1				
37 CONSTRUCTION									6	6							6	0	6	0				
38 MANUFACTURING	45		45	0	0				1508	1508							718	387	411	790	0			
39 FOODS									270	270							125	57	68	145				
40 TEXTILE									350	350							277	124	153	73				
41 RUBBER									93	93							61	41	32	52				
42 PAPER,PULP									66	66							24	11	13	41				
43 CHEMISTRY(NON USE)									177	177							29	23	6	148	NA			
44 CERAMICS,CEMENTS	48		48		NA				488	488							137	27	119	351				
45 IRON,STEEL									59	59							40	17	23	19				
46 NON-FERROUS METALS	0			0					0	0							0	NA	0	0				
47 METAL FABRI.,MACHINERY									2	2							2	0	2	0				
48 SMALL WARES,OTHERS	5		5						4	4							4	0	4	0				
49 RESIDENT.,COMMER.(TOTAL)									6270	6222						6222								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	47		47						6906	6906	2881	18	126	2457	515		2546	2376	150	345				
53 AIR TRANSPORTATION									394	394	15	15			379		0	0						
54 ROAD TRANSPORTATION									4652	4652	2583		126	2457			2469	2045	23	0				
55 RAILWAYS	47		47						163	163							55	54	2	108				
56 INTERNAL NAVIGATION									379	379	0			0			377	290	87	2				
57 INTERNATIONAL BUNKERS									417	417	3	3			135		45	7	38	234				
58 OTHERS(OVERH.,FORCES ET)									673	673	314	0	0	386	27		241	245	16	22				
59 NON MATERI. USE IN CHEM.									0												NA			
60 OTHER NON-ENERGY USE	2			2					244														21	36
61 TOTAL USE IN CHEMISTRY									177	177							29	23	6	148	0			

(Unit : 10^3 TCE)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
OTHERS (GREASE, ASPH.,ET)	PETROLE-UM COKE	REFINERY GAS	LPG	NATURAL GAS	NGL (COMPRE-SATED)	LNG	METHANOL	COKE OVEN GAS	COKE	COKE OVEN GAS	BLAST FURNACE GAS	BRIQUET	WOOD	CHARCOAL	FUEL ETHANOL FROM BIOMASS	AGRI-CULTURAL WASTES	HYDRO GENERATION PUBLIC UTILITY	HYDRO GENERATION AUTO GENERAT.	NUCLEAR GENERAT-ION	GEOTHERM. GENERAT. PUBLIC UTILITY	GEOTHERM. GENERAT. AUTO GENERAT.	OTHER GENERATION PUBLIC UTILITY	OTHER GENERATION AUTO GENERAT.	TOTAL OF ELEC-TRICITY	PUBLIC UTILITY	AUTO GENERAT-ION	GRAND TOTAL
				8017					0				19330	NA	0	18686	871	0	0	0	0	0	0				142657
48			0												0												2923
-35			-6		0	0	0																				-81692
									0			0	NA	NA	0												(-4173
0	NA		0																								-359
13	0		-6	8017	0	0	0		0			0	19330	0	0	18686	871	0	0	0	0	0	0				63695
189	55	0	50																								-369
			3	-194	0	0																					-199
				0	0		0																				0
				NA													-871		0	0		0		465	465		-1215
				0														0			0		0	134	0	134	-341
				0				20	0	0																	-6
									0	0																	0
												0															0
189	55	0	54	-194	0	0	0	20	0	0		0					-871	0	0	0	0	0	0	599	465	134	-2116
																								0	0	0	-545
				-2156																				0	0	0	-2156
0	0	0	0	-242																				0	0	0	-242
				0																				0	0	0	0
				0																							0
				0																				-13	-13	0	-13
				0				0																0	NA	0	0
										0																	0
																								0	NA		0
																								-22		-22	-29
0	0	0	0	-4582				-6																-107	-107	0	-4996
0	0	0	0	-7280				-6		0														-142	-120	-22	-7541
0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0											591
132	55		48	544			0	13	0			0	19330	0	0	18686								457	344	112	54153
	0		48	295			0	13	0			0	19330	0	0	18686								457	344	112	53653
	0		0	294				0	0			0	2122			6520								220	108	112	88413
													5351			5184								15	NA	15	10764
			NA																								0
																								18	NA	18	180
																								1	NA	1	6
	0		0	294				0	0			0	1771			1716								28	0	28	5413
																								14	NA	14	283
																								30	NA	30	381
																								9	NA	9	102
																								3	NA	3	68
																								4	NA	4	429
				248				0				0	1771			1716								14	NA	14	4075
				45					0															4	NA	4	63
																								0	NA	0	0
	NA								0															0	NA	NA	2
									0															0	0	NA	9
			NA	0																							
			13	1				13				0	12144	NA		11785								204	244	NA	38438
			0				0						44		0									0	0		6992
																											398
			0				0								0												4652
													44											0	0		254
																											379
																											417
																								32	32	NA	265
			0	248			0								0												248
																											254
132	55																										
			0	497			0								0									4	0	4	677

ENERGY BALANCES IN INDONESIA CA 1976

	1 TOTAL OF COAL C01-C05	2 COKING COAL	3 STEAM COAL	4 ANTHRA-CITE	5 LIGNITE	6 TOTAL OF CRUDE OIL C06-C08	7 ORIGINAL CRUDE OIL	8 REDUCED CRUDE OIL	9 PETROLE-UM PRODUCTS C09-C28	10 DOMESTIC FUEL-OIL C10-C20	11 GASOLINE C00-C14	12 AVIATION	13 SUPER	14 PREMIUM	15 JET FUEL	16 KEROSINE	17 DIESEL C07-C19	18 AUTOMOT.	19 INDUSTR.	20 HEAVY FUEL OIL	21 NAPHTHA	22 LOW SUL. WAXY RESIDUE	23 LUBRI-CANTS	24 SOLVENTS
1 DOMESTIC PRODUCTION	173		151	22	NA	110284	110284													0			9	3
2 IMPORT	1	1				1669	1550	59	6649	6617	361	0	0	381	550	3065	2702	2503	158	-29	-85	-2934		0
3 EXPORT	-8		0	-8		-90074	-90074		-8148	-79	0	0		0	0		0	0	0	-29				
4 (INTERNATIONAL BUNKERS)									(-4373)	(-4373)	-23	(-23)			(-1413)		(-92)	(-143)	(-78)	(-202)				
5 STOCK CHANGE	-4	0	-3	-1	NA	-299	-314	24	-524	-150	59	5	1	44	-6	39	-89	-92	2	-134	-227	-154	0	-2
6 PRIMARY ENERGY SUPPLY	182	1	148	13	0	21529	21447	83	-2012	6387	411	5	1	465	543	3034	2612	2411	201	-214	-312	-8087	9	1
7 REFINERY						-22020	-21938	-83	21899	13337	2732	24	134	2574	22	4899	3784	2728	1056	2649	287	8041	3	31
8 BELOW, LPG)									19												0			
9 CHEMICAL ENERGY									0															
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA						-1171	-1171							-738	-674	-65	-433				
12 POWER-UP USE																								
13 AUTO GENERATION	-21		-21						-654	-654							-654	-455	-200	0				
14 TOWN GAS	-1	-1	NA						-21	-21						0	-21	-2	-19	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	-22	-1	-21			-22020	-21938	-83	20862	11470	2732	24	134	2574	22	4899	2371	1598	773	2215	287	8041	3	31
18 CRUDE OIL FIELD						-644	-644		0	0							0	0	0	0				
19 NATURAL GAS FIELD																								
20 REFINERY						0	0		0	0							0	0	0	0	0	0	0	0
21 BOL PLANT																					0			
22 CHEMICAL ENERGY PLANT									0															
23 PUBLIC UTILITY									0	0							0	0	0	0				
24 TOWN GAS									0	0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	-3		-3	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	-3	0	-3	0	0	-644	-644	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS DIFF. DIFFERENCE	-1	0	-1	0	0	1135	1135	0	-1169	-1233	1	-5	1	5	-19	-387	-293	-119	-174	-584	25	13	0	0
31 FINAL CONSUMPTION	86		74	12	0				16899	14515	3145	25	137	2984	567	4026	4199	3979	850	1417	0		12	32
32 FINAL ENERGY USE	74		74	0	0				16763	14515	3145	25	137	2984	567	4026	4199	3979	850	1417	0			
33 INDUSTRY	34		34	0	0				2589	2589							1569	988	571	1049	0			
34 AGRICULTURE FORESTRY									337	337							306	279	27	31				
35 FISHERY									0	0							0	0						
36 MINERALS(EX.ENERGY SEC.)	0		0	0					166	166							166	94	12	55				
37 CONSTRUCTION									74	74							68	62	6	2				
38 MANUFACTURING	34		34	0	0				2921	2921							1959	554	546	921	0			
39 FOODS									389	389							291	129	72	187				
40 TEXTILE									423	423							342	177	165	81				
41 RUBBER									192	192							88	61	27	43				
42 PAPER,PULP									69	69							29	53	16	40				
43 CHEMISTRY(FUEL USE)									184	184							45	33	12	139	NA			
44 CERAMICS,CEMENTS	29		29		NA				670	670							272	42	210	358				
45 IRON,STEEL									108	108							73	35	38	34				
46 NON-FERROUS METALS	0			0					38	38							12	12	0	26				
47 METAL PROD.,MACHINERY									17	17							17	15	2	0				
48 SMALL WARES,OTHERS	5		5						24	24							20	16	4	4				
49 RESIDENT.,COMMER.(TOTAL)									8885	8926						4926								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	40		40						6285	6285	2810	15	135	2659	539		2547	2379	168	339				
53 AIR TRANSPORTATION									415	415	13	13			397		4	4						
54 ROAD TRANSPORTATION									4791	4791	2025		135	2659			1965	1939	26	0				
55 RAILWAYS	40		40						172	172							61	57	4	110				
56 INTERNAL NAVIGATION									471	471	0			0			448	383	66	27				
57 INTERNATIONAL FLIGHT									437	437	2	2			141		92	14	78	202				
58 OTHERS(OVERN.,FORCES ET)									944	944	304	10	1	294	28		543	523	20	68				
59 NON MATERI. USE IN CHEM.									0												NA			
60 OTHER NON-ENERGY USE	12			12					196														12	32
61 TOTAL USE IN CHEMISTRY									184	184							45	33	12	139	0			

(Unit : 10^3 TCE)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
OTHERS (GREASE, ASPH.,ETC)	PETROLEUM COKE	REFINERY GAS	LPG	NATURAL GAS	MSL (COKING-GASES)	LNG	METHANOL	TOWN GAS	COKE	COKE OVEN GAS	BLAST FURNACE GAS	BRIQUET	WOOD	CHARCOAL	FUEL ETHANOL FROM BIOMASS	AGRI-CULTURAL WASTES	WOOD GENERATION PUBLIC UTILITY	WOOD GENERATION AUTO GENERAT.	NUCLEAR GENERAT-ION	GEOTHERM. GENERAT. PUBLIC UTILITY	GEOTHERM. GENERAT. AUTO GENERAT.	OTHER GENERATION PUBLIC UTILITY	OTHER GENERATION AUTO GENERAT.	TOTAL OF ELEC-TRICITY	PUBLIC UTILITY	AUTO GENERAT-ION	GRAND TOTAL
				11534									20943	NA	0	17989	890	0	0	0	0	0	0				161715
41			0						0						0												9229
-59			0		0	0	0																				-59231
																											-4372
																											-817
11	NA		-1						0			0	NA	NA	0												
2	0		-1	11534	0	0	0		0			0	20943	0	0	17989	890	0	0	0	0	0	0				70937
188	43	0	41																								-131
			19	-1337	0	0																					-1318
				0	0		0																				0
				NA													-890		0	0		0		511	511		-2461
				0														0			0		0	203	0	203	-522
				0				20	0	0																	-2
									0	0																	0
												0															0
188	43	0	40	-1337	0	0	0	20	0	0		0					-890	0	0	0	0	0	0	714	511	203	-3434
																								0	0	0	-644
				-2624																				0	0	0	-2624
0	0	0	0	-238																				0	0	0	-238
				0																				0	0	0	0
				0																							0
				0																				-14	-14	0	-14
				0				0																0	NA	0	0
										0																	0
																								0	NA		0
																								-20		-20	-22
0	0	0	0	-6742				-8																-118	-118	0	-6969
																								-152	-132	-20	-10818
0	0	0	0	-9624				-8		0																	
																											-26
0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0											
189	43		59	593			0	12	0			0	20943	0	0	17989								562	379	183	57075
	0		59	322			0	12	0			0	20943	0	0	17989								562	379	183	56597
	0		0	321				0	0			0	6328			5442								383	120	183	15017
													4539			3993								39	NA	39	8818
			NA																								0
																								13	NA	13	174
																								9	NA	9	79
	0		0	321				0	0			0	1789			1538								123	0	123	5826
																								23	NA	23	412
																								38	NA	38	461
																								10	NA	10	112
																								3	NA	3	72
				270																				5	NA	5	459
				59				0				0	1789			1538								28	NA	28	4185
										0														8	NA	8	118
	NA																							2	NA	2	39
										0														2	NA	2	19
										0														2	0	2	31
			NA	0																							
			59	2				12				0	14550	NA		12538								224	224	NA	34240
			0					0					34		0									0	0		6361
																											615
																											4791
			0					0					34		0									0	0		247
																											471
																											437
																								35	35	NA	979
																											270
			0	270				0								0											
																											208
189	43																										
			0	511				0								0								5	0	5	730

ENERGY BALANCES IN INDONESIA CA 1977

	1 TOTAL OF COAL C01-C05	2 COKING COAL	3 STEAM COAL	4 ANTHRA-CITE	5 LIGNITE	6 TOTAL OF CRUDE OIL C06-C08	7 ORIGINAL CRUDE OIL	8 REDUCED CRUDE OIL	9 PETROLE-UM PRODUCTS C09-C20	10 DOMESTIC FUEL OIL C10-C20	11 GASOLINE C11-C14	12 AVIATION	13 SUPER	14 PREMIUM	15 JET FUEL	16 KEROSINE	17 DIESEL C17-C19	18 AUTOMOT.	19 INDUSTR.	20 HEAVY FUEL OIL	21 NAPHTHA	22 LOW SUL. WAXY RESIDUE	23 LUBRI-CANTS	24 SOLVENTS
1 DOMESTIC PRODUCTION	222		183	39	NA	123270	123270																	
2 IMPORT	0	0				5936	5936	30	3928	3876	79	1	0	25	639	1929	2147	1991	246	0			7	2
3 EXPORT	-7		-2	0		-97251	-97251		-11843	-933	0	0		0	0		0	0	0	-933	-939	-9466		0
4 INTERNATIONAL BUNKERS									(-578)	(-578)	(-23)	(-23)			(-154)	(-155)	(-833)	(-159)	(-683)	(-358)				
5 STOCK CHANGE	-14	0	-3	-11	NA	2015	1991	24	365	-104	-49	-2	0	-46	-27		23	-46	69	147	936	290	0	-12
6 PRIMARY ENERGY SUPPLY	201	0	173	28	0	34000	33946	54	-7623	2838	30	2	0	28	491	825	2769	1855	314	-787	-294	-9176	0	-9
7 REFINERY						-30387	-30333	-54	29745	18918	3501	21	137	3343	12	4235	5449	4243	1176	3760	1010	9474	6	49
8 NGL(LNG, LPG)									476															
9 CHEMICAL ENERGY									0												0			
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA						-1419	-1419							-950	-891	-59	-469				
12 PUMP-UP USE																								
13 AUTO GENERATION	-22		-22						-804	-804							-804	-537	-247	0				
14 TOWN GAS	0	0	NA						-23	-23						0	-21	-5	-16	-2				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	-22	0	-22			-30387	-30333	-54	27974	16701	3501	21	137	3343	12	4235	3664	2839	834	3292	1010	9474	6	49
18 CRUDE OIL FIELD						-424	-424		0	0							0	0	0	0				
19 NATURAL GAS FIELD																								
20 REFINERY						0	0		0	0							0	0	0	0	0	0	0	0
21 NGL PLANT																								
22 CHEMICAL ENERGY PLANT									0												0			
23 PUBLIC UTILITY									0	0							0	0	0	0				
24 TOWN GAS									0	0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL DUST	-5		-5	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	-5	0	-5	0	0	-424	-424	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS TICAL DIFFERENCE	-8	0	0	-8	0	-3189	-3189	0	-1305	-791	-25	1	0	-26	-1	517	-452	-314	-137	-838	-216	-298	0	0
31 FINAL CONSUMPTION	111		91	20	0				19653	18749	3586	23	137	3345	613	7577	5382	4370	1011	1672	0		13	31
32 FINAL ENERGY USE	91		91	0	0				18813	18749	3586	23	137	3345	613	7577	5382	4370	1011	1672	0			
33 INDUSTRY	51		51	0	0				3098	3098							1559	1168	390	1149	0			
34 AGRICULTURE FORESTRY									346	346							-321	295	26	25				
35 FISHERY									0	0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0					261	261							192	165	87	69				
37 CONSTRUCTION									93	93							88	78	10	5				
38 MANUFACTURING	51		51	0	0				2399	2399							1357	691	667	1041	0			
39 FOODS									454	454							242	152	90	212				
40 TEXTILE									497	497							416	230	185	81				
41 RUBBER									108	108							95	69	26	13				
42 PAPER,PULP									91	91							40	20	20	51				
43 CHEMISTRY(NON FUEL USE)									223	223							64	50	13	159	NA			
44 CERAMICS,CEMENTS	46		46		NA				825	825							354	75	279	471				
45 IRON,STEEL									127	127							90	47	43	37				
46 NON-FERROUS METALS	0			0					20	20							11	11	0	8				
47 METAL FABR.,MACHINERY									19	19							19	17	2	0				
48 SMALL VALVES,OTHERS	5		5						36	36							27	18	8	9				
49 RESIDENT.,COMMER.(TOTAL)									7619	7577						7577								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	40		40						7129	7129	3197	15	135	3046	569		2872	2491	181	182				
53 AIR TRANSPORTATION									436	436	13	13			415		3	3						
54 ROAD TRANSPORTATION									5484	5484	3181		135	3045			2303	2249	54	0				
55 RAILWAYS	40		40						146	146							44	41	3	82				
56 INTERNAL NAVIGATION									482	482	1			1			418	342	76	63				
57 INTERNATIONAL BUNKERS									578	578	2	2			154		83	15	68	338				
58 OTHERS(COMMER.,FORCES ET)									954	954	369	8	2	219	44		551	511	40	50				
59 RAW MATERI. USE IN CHEM.									0												NA			
60 OTHER NON-ENERGY USE	20			20					241														13	31
61 TOTAL USE IN CHEMISTRY									223	223							64	50	13	159	0			

(Unit : 10^3 TCE)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
																	WIND GENERATION			GEOTHERM. GENERAT.		OTHER GENERATION					
OTHERS (GREASE, ASPH.,ET)	PETROLEUM COKE	REFINERY GAS	LPG	NATURAL GAS	NGL (CONDENSATES)	ENG	METHANOL	TOWN GAS	COKE	COKE OVEN GAS	BLAST FURNACE GAS	BRIQUET	WOOD	CHARCOAL	FUEL ETHANOL FROM BIOMASS	AGRICULTURAL WASTES	PUBLIC UTILITY	AUTO GENERAT.	NUCLEAR GENERATION	PUBLIC UTILITY	AUTO GENERAT.	PUBLIC UTILITY	AUTO GENERAT.	TOTAL OF ELECTRICITY	PUBLIC UTILITY	AUTO GENERATION	GRAND TOTAL
				17613									21944	NA	0	17264	817	0	0	0	0	0	0				183130
32			11						0																		9874
-43			-177		-220	-1233	0								0												-110561
																											(-578)
-6	NA		0						0			0	NA	NA	0												2306
-10	0		-165	17613	-220	-1233	0		0			0	21944	0	0	17264	817	0	0	0	0	0	0				84762
162	52	0	53																								-642
			476	-5015	220	1587																					-2730
				0	0		0																				0
				NA													-817		0	0		0		591	591		-1645
				0														0			0		0	247	0	247	-834
				0				20	0	0																	-1
									0	0																	0
												0															0
162	52	0	529	-5015	220	1587	0	20	0	0		0					-817	0	0	0	0	0	0	837	591	247	-5655
																								0	0	0	-824
				-4361																				0	0	0	-4361
0	0	0	0	-234																				0	0	0	-234
				0																				0	0	0	0
				0																							0
				0																				-17	-17	0	-17
				0				0																0	NA	0	0
										0																	0
																								0	NA		0
																								-22		-22	-24
0	0	0	0	-8881				-7																-144	-144	0	-9042
0	0	0	0	-13186				-7		0														-182	-169	-22	-13804
0	0	0	0	0	0	-356	0	0	0	0		0	0	0	0	0											-4959
144	52		64	1412			0	12	0			0	21944	0	0	17264								655	430	225	68452
	0		41	734			0	12	0			0	21944	0	0	17264								655	430	225	55518
	0		0	733				0	0			0	5124			4938								356	149	225	13411
													3237			2551								49	NA	42	6175
			NA																								0
																								22	NA	22	282
																								11	NA	11	184
	0		0	733				0	0			0	1887			1337								152	0	152	4709
																								28	NA	28	482
																								47	NA	47	548
																								11	NA	11	119
																								5	NA	5	95
				677																				0	NA	0	968
				55				0				0	1887			1337								35	NA	35	4337
									0															10	NA	10	137
	NA																							1	NA	1	21
									0															2	NA	2	22
			NA	0					0															3	0	3	41
			44	2				12				0	18783	NA		13226								251	251	NA	37915
			0				0						36		0									0	0		7196
																											430
			0				0								0												5484
													36											0	0		222
																											182
																											578
																								39	39	NA	993
			0	677			0								0												677
144	52																										269
			0	1355			0								0									0	0	0	1586

ENERGY BALANCES IN INDONESIA CA 1978

	1 TOTAL OF COAL C01-C05	2 COKING COAL	3 STEAM COAL	4 ANTHRA-CITE	5 LIGNITE	6 TOTAL OF CRUDE OIL C06-C08	7 ORIGINAL CRUDE OIL	8 REDUCED CRUDE OIL	9 PETROLE-UM PRODUCTS C09-C20	10 DOMESTIC FUEL OIL C10-C20	11 GASOLINE C11-C14	12 AVIATION	13 SUPER	14 PREMIUM	15 JET FUEL	16 KEROSINE	17 DIESEL C17-C19	18 AUTOMOT.	19 INDUSTR.	20 HEAVY FUEL OIL	21 NAPHTHA	22 LOW SUL. WAXY RESIDUE	23 LUBRI-CANTS	24 SOLVENTS
1 DOMESTIC PRODUCTION	258		197	61	NA	119578	119578																	
2 IMPORT	0	0				6224	6224	0	3659	3577	3	0	0	3	652	898	2024	2024	0	0			9	2
3 EXPORT	-30		-3	-27		-92568	-92568		-9575	-811	0	0		0	0		0	0	0	-411	-289	-8175		0
4 (INTERNATIONAL BUNKERS)									(-697)	(-697)	(-1)	(-1)			(-283)		(-683)	(-123)	(-563)	(-337)				
5 STOCK CHANGE	-42	0	-24	-18	NA	-552	-553	1	-509	-542	-122	1	-4	-119	16	-85	-160	-178	38	-191	49	-4	-18	5
6 PRIMARY ENERGY SUPPLY	884	0	170	16	0	32682	32681	1	-6434	2623	-119	1	-4	-116	419	813	1864	1825	38	-603	-247	-8179	-9	7
7 REFINERY						-32025	-32024	-1	31471	26187	3743	26	134	3583	25	6136	6428	4893	1538	4862	1166	8915	36	34
8 BLENDING, LPG)									474															
9 CHEMICAL ENERGY									0												0			
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA						-1799	-1799							-1161	-1112	-49	-638				
12 PRAP-SP USE																								
13 AUTO GENERATION	-76		-76						-955	-955							-955	-469	-295	0				
14 TOWN GAS	0	0	NA						-25	-25						0	-25	-7	-18	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	-76	0	-76			-32025	-32024	-1	29567	18109	3743	26	134	3583	25	6136	4281	3104	1176	4225	1166	8915	36	34
18 CRUDE OIL FIELD						-252	-252		0	0							0	0	0	0				
19 NATURAL GAS FIELD																								
20 REFINERY						0	0		-1	0							0	0	0	0	0	0	0	0
21 NGL PLANT																								
22 CHEMICAL ENERGY PLANT									0												0			
23 PUBLIC UTILITY									0	0							0	0	0	0				
24 TOWN GAS									0	0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	-8		-8	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	-8	0	-8	0	0	-252	-252	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS TICAL DIFFERENCE	3	0	-7	10	0	-485	-485	0	-1569	25	384	-2	11	265	38	1525	-71	37	-109	-1271	-657	-234	0	0
31 FINAL CONSUMPTION	165		28	27	0				21574	21658	3928	25	141	3762	731	8475	6073	4987	1186	1851	0		27	41
32 FINAL ENERGY USE	28		28	0	0				21538	21658	3928	25	141	3762	731	8475	6073	4987	1186	1851	0			
33 INDUSTRY	54		54	0	0				3667	3667							2107	1434	673	1360	0			
34 AGRICULTURE FORESTRY									491	491							393	358	35	8				
35 FISHERY									0	0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0					227	227							183	185	58	44				
37 CONSTRUCTION									101	101							100	93	7	1				
38 MANUFACTURING	54		54	0	0				2938	2938							1651	878	573	1286	0			
39 FOODS									569	569							346	192	114	263				
40 TEXTILE									549	549							472	287	206	76				
41 BUTCHER									120	120							107	80	26	14				
42 PAPER,PULP									129	129							68	37	32	41				
43 CHEMISTRY(FUEL USE)									292	292							97	80	17	195	NA			
44 CERAMICS,CEMENTS	44		44		NA				976	974							411	102	349	565				
45 IRON,STEEL									219	219							111	55	56	108				
46 NON-FERROUS METALS	0			0					9	9							8	8	0	1				
47 METAL FABRI.,MACHINERY									29	29							27	24	2	2				
48 SMALL BARES,OTHERS	6		6						27	27							25	13	12	2				
49 RESIDENT.,COMMER.(TOTAL)									8555	8475						8475								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	28		28						7943	7943	3444	19	140	3470	677		3186	3048	179	436				
53 AIR TRANSPORTATION									430	430	13	13			474		3	3						
54 ROAD TRANSPORTATION									6211	6211	3430		140	3470			2581	2556	25	0				
55 RAILWAYS	28		28						152	152							81	78	3	71				
56 INTERNAL NAVIGATION									482	482	0			0			454	359	95	28				
57 INTERNATIONAL BUNKER									669	669	1	1			203		68	12	56	337				
58 OTHERS(GOVERN.,FORCES 1)									973	973	265	11	1	272	54		579	525	54	55				
59 RAW MATERI. USE IN CHEM.									0												NA			
60 OTHER NON-ENERGY USE	27			27					436														27	41
61 TOTAL USE IN CHEMISTRY									292	292							97	83	17	195	0			

(Unit : 10^3 TCE)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
																	Other generation			Geothern. generat.		Other generation					
Others (grease, asfh.,etc)	Petroleum coke	Refinery gas	LPG	Natural gas	Nat (condensates)	LNG	Methanol	Town gas	Coke	Coke oven gas	Blast furnace gas	Briquet	Wood	Charcoal	Fuel ethanol from biomass	Agri-cultural wastes	Public utility	Auto generat.	Nuclear generat-ion	Public utility	Auto generat.	Public utility	Auto generat.	Total of elec-tricity	Public utility	Auto generat-ion	Grand total
				30327									22944	NA	0	16548	1060	181	0	0	0	0	0				190876
66			1						0																		9883
-43			-457		-1938	-7519	0								0												-188629
																											(-609)
10	NA		0						0			0	NA	NA	0												-1103
34	0		-652	30327	-1938	-7519	0		0			0	22944	0	0	16548	1060	181	0	0	0	0	0				89937
276	58	1	58																								-354
			674	-11888	1938	7553																					-1724
				0	0		0																				0
				NA													-1060		0	0		0		684	684		-2125
				0														-181			0		0	339	0	339	-872
				0				20	0	0																	-4
									0	0																	0
												0															0
276	58	1	732	-11888	1938	7553	0	20	0	0		0					-1060	-181	0	0	0	0	0	1023	684	339	-5129
																								0	0	0	-252
				-8255																				0	0	0	-8255
0	0	-1	0	-245																				0	0	0	-245
				0																				0	0	0	0
				0																							0
				0																				-19	-19	0	-19
				0				0																0	NA	0	0
										0																	0
																								0	NA		0
																								-21		-21	-29
0	0	0	0	-7784				-7																-154	-154	0	-7875
0	0	-1	0	-16211				-7		0														-175	-173	-21	-16675
0	0	0	0	0	0	-34	0	0	0	0		0	0	0	0	0											-2605
310	58		89	2225			0	14	0			0	22944	0	0	16548								829	516	310	64238
	0		89	1141			0	14	0			0	22944	0	0	16548								829	516	310	62699
	0		0	1139				0	0			0	3651			2637								439	262	310	81624
													1684			1292								49	NA	49	3316
			NA																								0
																								70	NA	70	297
																								13	NA	13	114
	0		0	1139				0	0			0	1587			1435								185	0	185	7235
																								36	NA	36	654
																								56	NA	56	625
																								13	NA	13	133
																								8	NA	8	137
				1684																				12	NA	12	1388
				56					0			0	1587			1435								42	NA	42	4539
										0														12	NA	12	231
	NA																							1	NA	1	10
										0														3	NA	3	32
			NA	0						0														3	0	3	36
			89	2					14			0	19257	NA		13918								392	392	NA	42840
			0				0						34		0									0	0		8507
																											498
			0				0								0												4211
													34											0	0		216
																											492
																											809
																								47	47	NA	1020
			0	1484			0								0												9884
310	58																										483
			0	2167			0								0									12	0	12	2471

ENERGY BALANCES IN INDONESIA CA 1979

	1 TOTAL OF COAL C01-C05	2 COKING COAL	3 STEAM COAL	4 ANTHRA-CITE	5 LIGNITE	6 TOTAL OF CRUDE OIL C06-C08	7 ORIGINAL CRUDE OIL	8 REDUCED CRUDE OIL	9 PETROLE-UM PRODUCTS C09-C20	10 DOMESTIC FUEL OIL C10-C20	11 GASOLINE C11-C14	12 AVIATION	13 SUPER	14 PREMIUM	15 JET FUEL	16 KEROSINE	17 DIESEL C17-C19	18 AUTOMOT.	19 INDUSTR.	20 HEAVY FUEL OIL	21 NAPHTHA	22 LOW SUL. WAXY RESIDUE	23 LUBRI-CANTS	24 SOLVENTS
1 DOMESTIC PRODUCTION	276		197	77	NA	112079	112079																	
2 IMPORT	0	0				6313	6108	205	3164	3164	0	0	0	0	356	1166	1642	1587	55	0			0	0
3 EXPORT	-52		-43	-10		-29934	-29934		-18813	-651	-8	-8		0	-192		-159	-97	-53	-392	-2228	-11065		0
4 (INTERNATIONAL BUNKERS)									(-484)	(-484)	(-23)	(-2)			(-193)		(-63)	(-10)	(-53)	(-227)				
5 STOCK CHANGE	-90	0	5	-95	NA	2416	2416	0	586	278	112	1	11	169	-21	-243	314	327	-11	114	53	245	6	4
6 PRIMARY ENERGY SUPPLY	134	0	162	-28	0	81774	81569	205	-10843	2791	165	-2	11	180	143	923	1808	1817	-10	-188	-2174	-10769	6	4
7 REFINERY						-36562	-36562	0	36245	22030	4246	28	128	4169	239	7148	7215	5777	1438	3171	1222	12435	117	23
8 NGL(LNG, LPG)									206												0			
9 CHEMICAL ENERGY									0															
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA						-2826	-2016							-1000	-961	-39	-1686				
12 PUMP-UP USE																								
13 AUTO GENERATION	-57		-57						-1273	-1273							-1273	-887	-386	0				
14 TOWN GAS	0	0	NA						-27	-27						0	-27	-8	-18	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	-57	0	-57			-36562	-36562	0	33565	18645	4246	28	128	4169	239	7148	4915	3920	995	2085	1222	12435	117	23
18 CRUDE OIL FIELD						-269	-269		-179	-179							-162	-148	-15	-9				
19 NATURAL GAS FIELD																								
20 REFINERY						-221	-221		-3060	-3045							-194	-94	-100	-819	0	-2	0	0
21 NGL PLANT																					0			
22 CHEMICAL ENERGY PLANT									0															
23 PUBLIC UTILITY									0	0							0	0	0	0				
24 TOWN GAS									0	0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	0		NA	NA																				
28 FLARE AND LOSSES	-15	0	-15	NA	NA	-73	-73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	-15	0	-15	0	0	-1054	-1054	0	-1231	-1176	0	0	0	0	0	0	-357	-242	-115	-819	0	-2	0	0
30 STATIS TICAL DIFFERENCE	47	0	8	59	0	-1158	-3953	-205	2520	3037	18	3	-19	61	119	1283	450	96	354	897	953	-1474	195	0
31 FINAL CONSUMPTION	128		97	31	0				23991	23297	4419	25	120	4274	823	9355	6815	5599	1225	1886	0		318	27
32 FINAL ENERGY USE	97		97	0	0				23347	23297	4419	25	120	4274	823	9355	6815	5599	1225	1886	0			
33 INDUSTRY	73		73	0	0				4239	4239							2714	1687	1027	1525	0			
34 AGRICULTURE FORESTRY									473	473							441	423	39	12				
35 FISHERY									0	0							0	0						
36 BINDUSTRY.ENERGY SEC.)	12		12	0					270	270							185	114	71	84				
37 CONSTRUCTION									98	98							97	87	10	0				
38 MANUFACTURING	61		61	0	0				3319	3319							1970	1042	928	1429	0			
39 FOODS									582	582							355	210	145	228				
40 TEXTILE									607	607							528	326	202	79				
41 RUBBER									129	129							114	99	24	15				
42 PAPER,PULP									144	144							73	36	37	71				
43 CHEMISTRY(FUEL USE)									332	332							143	165	38	189	NA			
44 CERAMICS,CEMENTS	53		53		NA				954	954							322	51	270	632				
45 IRON,STEEL									237	237							165	53	52	132				
46 NON-FERROUS METALS	0			0					8	8							8	8	3	0				
47 METAL FABR.,MACHINERY									31	31							30	27	3	1				
48 SMALL MINES,OTHERS	8		8						372	372							299	157	133	82				
49 RESIDENT.,COMMER.(TOTAL)									9355	9355						9355								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	24		24						9846	9846	4158	17	118	4020	784		3492	3428	174	345				
53 AIR TRANSPORTATION									669	669	15	15			591		3	3						
54 ROAD TRANSPORTATION									7278	7278	4139		118	4020			3139	3124	15	0				
55 RAILWAYS	24		24						144	144							93	88	5	52				
56 INTERNAL NAVIGATION									531	531	0			0			564	484	100	27				
57 INTERNATIONAL BUNKER									484	484	2	2			193		63	10	53	227				
58 OTHERS(GOVERN.,FORCES 3)									657	657	263	8	1	254	39		219	275	24	56				
59 NON MATERI. USE IN CHEM.									0												NA			
60 OTHER NON-ENERGY USE	31			31					614														318	27
61 TOTAL USE IN CHEMISTRY									332	332							143	165	38	189	0			

(Unit : 10^3 TCE)

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
																	HYDRO GENERATION					OTHER GENERATION					
OTHERS (GREASE, ASPH.,ETC)	PETROLEUM COKE	REFINERY GAS	LPG	NATURAL GAS	NGL (CONDENSATES)	LNG	METHANOL	TOWN GAS	COPE	COKE OVEN GAS	BLAST FURNACE GAS	BRIQUET	WOOD	CHARCOAL	FUEL ETHANOL FROM BIOMASS	AGRICULTURAL WASTES	PUBLIC UTILITY	AUTO GENERAT.	NUCLEAR GENERAT-ION	GEOTHERM. PUBLIC UTILITY	GENERAT. AUTO GENERAT.	PUBLIC UTILITY	AUTO GENERAT.	TOTAL OF ELEC-TRICITY	PUBLIC UTILITY	AUTO GENERAT-ION	GRAND TOTAL
				37888									24138	NA	0	15925	1328	181	0	0	0	0	0				691814
NA			0						0																		9377
-11			-689		-3136	-12747	0								0												-169502
																											(-484)
-1	NA		-1						0			0	NA	NA	0												2912
-12	0		-689	37888	-3136	-12747	0		0			0	24138	0	0	15925	1328	181	0	0	0	0	0				91821
-369	52	1	46																								-317
			766	-14870	5365	12813																					4814
				0	0		0																				0
				NA													-1328		0	0		0		722	722		-2692
				0														-181			0		0	423	0	423	-1068
				0				42	0	0																	15
									0	0																	0
												0															0
369	52	1	722	-14870	5365	12813	0	42	0	0		0					-1328	-181	0	0	0	0	0	1146	222	423	-87
																								-20	0	-20	-452
				-9589																				0	0	0	-9589
0	-52	-1	0	-338																				-22	0	-22	-2146
				0																				0	0	0	0
				0																							0
				0																				-19	-19	0	-19
				-15				0																0	NA	0	-15
										0																	0
																								0	NA		0
																								-16		-16	-16
0	0	0	0	-8466				-1																-89	-89	0	-8634
0	-52	-1	0	-18458				-1		0														-157	-58	-58	-20866
41	0	0	-32	-2071	-2229	-66	0	-1	0	0		0	0	0	0	0											-5941
299	0		50	2539			0	37	0			0	24138	0	0	15925								989	624	365	47747
	0		50	1208			0	37	0			0	24138	0	0	15925								989	624	365	45739
	0		0	1206				0	0			0	2692			2547								585	220	365	10741
													0			1167								58	NA	58	1658
			NA																								0
																								72	NA	72	355
																								12	NA	12	110
	0		0	1204				0	0			0	2692			1389								223	0	223	8359
																								41	NA	41	623
																								61	NA	61	669
																								14	NA	14	183
																								8	NA	8	152
				1813																				17	NA	17	1362
				192					0			0	2692			1389								32	NA	32	4703
										0														12	NA	12	248
	NA																							1	NA	1	9
										0														4	NA	4	34
			NA	0						0														33	0	33	413
			50	0				37				0	22869	NA		13378								359	359	NA	45189
			0				0						36		0									0	0		9107
																											489
			0				0								0												7278
													36											0	0		205
																											531
																											484
																								45	45	NA	202
			0	1333			0								0												1333
																											475
289	0																										
			0	2347			0								0									17	0	17	2696

2. List of Commodity Balance Table (1969-1979)

ENERGY BALANCES IN INDONESIA CA 1969

	1 TOTAL OF COAL C01-C05 TOR	2 COKING COAL TOR	3 STEAM COAL TOR	4 ANTHRA-CITE TOR	5 LIGNITE TOR	6 TOTAL OF CRUDE OIL C06-C08 BBL	7 ORIGINAL CRUDE OIL BBL	8 REDUCED CRUDE OIL BBL	9 PETROLE-UM PRODUCTS C09-C28	10 DOMESTIC FUEL OIL C10-C20 BBL	11 GASOLINE C11-C14 BBL	12 AVIATION BBL	13 SUPER BBL	14 PREMIUM BBL	15 JET FUEL BBL	16 KEROSINE BBL	17 DIESEL C12-C19 BBL	18 ADTCBOT. BBL	19 INDUSTR. BBL	20 HEAVY FUEL OIL BBL	21 NAPHTHA BBL	22 LOW SUL. WAXY RESIDUE BBL	23 LUBRI-CANTS BBL	24 SOLVENTS BBL
1 DOMESTIC PRODUCTION	0		0	0	NA	276951	276951																	
2 IMPORT	0	0				217	0	217		0	0	0	0	0	0	0	0	0	0	0				
3 EXPORT	0		0	0		-189817	-189817			-1582	-256	0		-256	-231		-153	-151	-2	-941			0	0
4 (INTERNATIONAL BUNKERS)									( )	(-218)	(0)	(0)			(0)		(-26)	(-0)	(-18)	(-1853)	0	-21781		-46
5 STOCK CHANGE	0	0	NA	NA	NA	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	0	0	0	0	0	82352	82134	217		-1582	-256	0	0	-256	-231	0	-153	-151	-2	-941	0	-21781	0	-46
7 REFINERY						-75921	-75703	-217		7658	1737	33	1	1704	202	2252	1331	969	342	2055	0	16960	21	200
8 BRIQUETS, LPG)																								
9 CHEMICAL ENERGY																								
10 PETROCHEMICAL LPG																					0			
11 PUBLIC UTILITY	0		NA							-220							-152	-134	-19	-68				
12 PERS-SP USE																								
13 AUTO GENERATION	0		0							-122							-122	-23	-49	0				
14 TOWN GAS	0	0	NA							-6						0	-6	-1	-6	0				
15 COKE	0	0																						
16 BRIQUES	0		0																					
17 TRANSFORMATION(TOTAL)	0	0	0			-75921	-75703	-217		7310	1737	33	1	1704	202	2252	1051	762	209	1987	0	16960	21	200
18 CRUDE OIL FIELD						0	NA			0							0	0	0	0				
19 NATURAL GAS FIELD																								
20 REFINERY						0	0			0							0	0	0	0	0	0	0	0
21 NGL PLANT																								
22 CHEMICAL ENERGY PLANT																					0			
23 PUBLIC UTILITY										0							0	0	0	0				
24 TOWN GAS										0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	0		NA	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS DIFF. DIFFERENCE	0	0	0	0	0	-8431	-8431	0		-11	4	-1	0	10	25	461	-142	-95	-17	-369	0	4821	0	0
31 FINAL CONSUMPTION	0		0	0	0					5718	1487	29	1	1457	75	2713	756	516	240	686	0		21	154
32 FINAL ENERGY USE	0		0	0	0					5718	1487	29	1	1457	75	2713	756	516	240	686	0			
33 INDUSTRY	0		0	0	0					524							303	158	144	222	0			
34 AGRICULTURE FORESTRY										33							28	19	10	5				
35 FISHERY										0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0						89							89	29	51	0				
37 CONSTRUCTION										0							0	0	0	0				
38 MANUFACTURING	0		0	0	0					418							194	138	84	217	0			
39 FOODS										108							22	14	8	84				
40 TEXTILE										20							15	13	2	5				
41 RUBBER										23							14	7	9	6				
42 PAPER,PULP										17							6	2	4	10				
43 CHEMISTRY(EXCL USE)										2							0	0	0	2	NA			
44 CERAMICS,CEMENTS	0		0		NA					103							22	5	17	80				
45 IRON,STEEL										0							0	0	0	0				
46 NON-FERROUS METALS	0			0						0							0	NA		0				
47 METAL FABRI.,MACHINERY										0							0	0	0	0				
48 SMALL NAMES,OTHERS	0		0							137							112	69	43	27				
49 RESIDENT.,COMMER.(TOTAL)										2713						2713								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	0		0							2256	1437	29	1	1457	75		273	184	89	420				
53 AIR TRANSPORTATION										104	29	29			75		0	0						
54 ROAD TRANSPORTATION										1568	1458		1	1457			110	148	2	0				
55 RAILWAYS	0		0							170							37	34	2	133				
56 INTERNAL NAVIGATION										202	0			0			104	32	68	102				
57 INTERNATIONAL BUNKERS										211	0	0			0		24	8	18	185				
58 OTHERS(GOVERN.,FORCES 3)										224	0	0	0	0	0		189	173	7	48				
59 RAW MATERI. USE IN CHEM.																								
																					NA			
60 OTHER NON-ENERGY USE	0			0																			21	154
61 TOTAL USE IN CHEMISTRY										2							0	0	0	2	0			

25 OTHERS (GREASE, ASPH.,ET) MBBL	26 PETROLEUM COKE MBBL	27 REFINERY GAS MCF	28 LPG MBBL	29 NATURAL GAS MMCF	30 NGL (CONDENSATES) MBBL	31 LNG MM3	32 METHANOL TON	33 TOWN GAS MM3	34 COKE TON	35 COKE OVEN GAS MM3	36 BLAST FURNACE GAS MM3	37 BRIQUET TON	38 WOOD MM3	39 CHARCOAL TON	40 FUEL ETHANOL FROM BIOMASS TON	41 AGRI-CULTURAL WASTES MM3	42 HYDRO GENERATION PUBLIC UTILITY GWH	43 HYDRO GENERATION AUTO GENERAT. GWH	44 NUCLEAR GENERAT-ION GWH	45 GEOTHERM. PUBLIC UTILITY GWH	46 GEOTHERM. AUTO GENERAT. GWH	47 OTHER GENERATION PUBLIC UTILITY GWH	48 OTHER GENERATION AUTO GENERAT. GWH	49 TOTAL OF ELEC-TRICITY GWH	50 PUBLIC UTILITY GWH	51 AUTO GENERAT-ION GWH	52 GRAND TOTAL
				104872									39872	NA	0	85355	1169	0	0	0	0	0	0				
NA			0						0																		
-427					0	0	0								0												
0	NA		0						0			0	NA	NA	0												( )
-427	0		-115	104872	0	0	0		0			0	39872	0	0	85355	1169	0	0	0	0	0	0				
221	0	0	131																								
			0	0	0	0																					
				0	0		0																				
				NA													-1169		0	0		0		1855	1855		
				0														0			0		0	374	0	374	
				0				34111	0	0																	
									0	0																	
												0															
221	0	0	131	0	0	0	0	34111	0	0		0					-1169	0	0	0	0	0	0	2229	1855	374	
				0																				0	0	0	
0	0	0	0	-215																				0	0	0	
				0																				0	0	0	
				0																				0	0	0	
				0																				0	0	0	
				0				0																0	NA	0	
										0																	
																								0	NA		
																								0		0	
0	0	0	0	-51169				-8495																-401	-401	0	
0	0	0	0	-51884				-8495		0														-401	-401	0	
0	0	0	-14	-56889	0	0	0	0	0	0		0	0	0	0	0											
294	0		2	2699			0	25416	0			0	39872	0	0	85355								1020	1454	374	
	0		2	1049			0	25416	0			0	39872	0	0	85355								1020	1454	374	
	0		0	1049				0	0			0	24818			53618								643	269	374	
													21592			46650								36	NA	36	
			NA																								
																								94	NA	94	
																								0	NA	0	
	0		0	1049				0	0			0	3225			6968								243	0	243	
																								29	NA	29	
																								21	NA	21	
																								20	NA	20	
																								7	NA	7	
				1049																				0	NA	NA	
				0				0				0	3225			6968								25	NA	25	
									0															0	NA	NA	
	NA																							0	NA	0	
									0															0	NA	NA	
			NA	0																				142	0	142	
			2	0				25416				0	14690	NA		31737								954	954	NA	
			0				0						165		0									0	0		
			0				0						165		0									0	0		
																								231	231	NA	
			0	1049			0								0												
294	0																										
			0	2099			0								0									0	0	0	

ENERGY BALANCES IN INDONESIA CA 1970

	1 TOTAL OF COAL C01-C05 1000	2 COKING COAL 1000	3 STEAM COAL 1000	4 ANTHRA-CITE 1000	5 LIGNITE 1000	6 TOTAL OF CRUDE OIL C06-C08 1000L	7 ORIGINAL CRUDE OIL 1000L	8 REDUCED CRUDE OIL 1000L	9 PETROLE-UM PRODUCTS C09-C20	10 DOMESTIC FUEL OIL C10-C20 1000L	11 GASOLINE C11-C14 1000L	12 AVIATION 1000L	13 SUPER 1000L	14 PREMIUM 1000L	15 JET FUEL 1000L	16 KEROSINE 1000L	17 DIESEL C17-C19 1000L	18 AUTOMOT. 1000L	19 INDUSTR. 1000L	20 HEAVY FUEL OIL 1000L	21 NAPHTHA 1000L	22 LOW SUL. WAXY RESIDUE 1000L	23 LUBRI-CANTS 1000L	24 SOLVENTS 1000L
1 DOMESTIC PRODUCTION	0		0	0	NA	311518	311518			0	0	0	0	0	0	0	0	0	0	0			0	0
2 IMPORT	0	0				2363	0	2363																
3 EXPORT	0		0	0		-228268	-228268			-1794	-361	-5		-356	-24		-32	-32	0	-1376	0	-23254		-39
4 INTERNATIONAL BUNKERS									( )	(-3273)	(0)	(0)			(0)		(-393)	(-181)	(-293)	(-2873)				
5 STOCK CHANGE	0	0	NA	NA	NA	-2021	0	-2021		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	0	0	0	0	0	83592	83250	342		-1794	-361	-5	0	-356	-24	0	-32	-32	0	-1376	0	-23254	0	-39
7 REFINERY						-84825	-80483	-342		8336	1948	27	7	1933	146	2363	1435	962	472	2444	0	23803	17	199
8 NGL(LNG, LPG)																					0			
9 CHEMICAL ENERGY																								
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA							-271							-185	-167	-18	-85				
12 FERP-BP USE																								
13 AUTO GENERATION	0		0							-272							-178	-115	-68	0				
14 TOWN GAS	0	0	NA							-6						0	-6	-1	-5	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 (TRANSFORMATION TOTAL)	0	0	0			-84825	-80483	-342		7889	1948	27	7	1933	146	2363	1664	683	381	2359	0	23803	17	199
18 CRUDE OIL FIELD						0	NA			0							0	0	0	0				
19 NATURAL GAS FIELD																	0	0	0	0	0	0	0	0
20 REFINERY						0	0			0														
21 NGL PLANT																					0			
22 CHEMICAL ENERGY PLANT																								
23 PUBLIC UTILITY										0							0	0	0	0				
24 TOWN GAS										0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	0		NA	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATISTICAL DIFFERENCE	0	0	0	0	0	-2767	-2767	0		34	-13	-1	0	-13	-13	365	-124	-32	-91	-179	0	-549	0	0
31 FINAL CONSUMPTION	0		0	0	0					6123	1574	22	7	1544	188	2728	908	619	299	884	0		17	160
32 FINAL ENERGY USE	0		0	0	0					6123	1574	22	7	1544	188	2728	908	619	299	884	0			
33 INDUSTRY	0		0	0	0					715							442	212	290	274	0			
34 AGRICULTURE FORESTRY										47							35	23	13	12				
35 FISHERY										0							0	0						
36 MINING(EN.ENERGY SEC.)	0		0	0						91							91	35	56	0				
37 CONSTRUCTION										0							0	0	0	0				
38 MANUFACTURING	0		0	0	0					577							318	184	132	261	0			
39 FOODS										10							21	16	5	68				
40 TEXTILE										33							25	20	5	8				
41 RUBBER										37							29	15	15	8				
42 PAPER,PULP										20							5	2	3	15				
43 CHEMISTRY(FUEL USE)										1							0	0	0	1	NA			
44 CERAMICS,CEMENTS	0		0		NA					112							23	6	16	90				
45 IRON,STEEL										0							0	0	0	0				
46 NON-FERROUS METALS	0			0						0							0	NA		0				
47 METAL PROD.,MACHINERY										0							0	0	0	0				
48 SMALL WARES,OTHERS	0		0							284							212	125	87	72				
49 RESIDENT.,COMMER.(TOTAL)										2728						2728								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	0		0							2514	1574	22	7	1544	188		323	236	87	509				
53 AIR TRANSPORTATION										138	22	22			188		0	0						
54 ROAD TRANSPORTATION										1716	1552		7	1544			154	151	3	0				
55 RAILWAYS	0		0							161							49	38	2	121				
56 INTERNAL WATERWAYS										199	0			0			89	36	53	100				
57 INTERNATIONAL BUNKERS										327	0	0			0		39	10	29	287				
58 OTHERS(GOVERN.,FORCES A)										765	0	0	0	0	0		143	149	3	22				
59 RAW MATERI. USE IN CHEM.																						NA		
60 OTHER NON-ENERGY USE	0			0																			17	160
61 TOTAL USE IN CHEMISTRY										1							0	0	0	1	0			

25 OTHERS (GREASE, ASPH.,ET) BBBL	26 PETROLE-UM COKE BBBL	27 REFINERY GAS MCF	28 LPG BBBL	29 NATURAL GAS MMCF	30 NGL (CONDEN-SATES) BBBL	31 LNG MM3	32 METHANOL TON	33 TOWN GAS MM3	34 COKE TON	35 COKE OVEN GAS MM3	36 BLAST FURNACE GAS MM3	37 BRIQUET TON	38 WOOD MM3	39 CHARCOAL TON	40 FUEL ETHANOL FROM BIOMASS TON	41 AGRI-CULTURAL WASTES MM3	42 MINOR GENERATION PUBLIC UTILITY GWH	43 MINOR GENERATION AUTO GENERAT. GWH	44 NUCLEAR GENERAT-ION GWH	45 GEOTHERM. GENERAT. PUBLIC UTILITY GWH	46 GEOTHERM. GENERAT. AUTO GENERAT. GWH	47 OTHER GENERATION PUBLIC UTILITY GWH	48 OTHER GENERATION AUTO GENERAT. GWH	49 TOTAL OF ELEC-TRICITY GWH	50 PUBLIC UTILITY GWH	51 AUTO GENERAT-ION GWH	52 GRAND TOTAL
				108541									43652	NA	0	91032	1225	0	0	0	0	0	0				
NA			0						0																		
-455					0	0	0								0												
																											( )
0	NA		0						0			0	NA	NA	0												
-455	0		-76	108541	0	0	0		0			0	43652	0	0	91032	1225	0	0	0	0	0	0				
820	218	4813	74																								
			10	-2383	0	0																					
				0	0		0																				
				NA													-1225		0	0		0		2184	2184		
				0														0			0		0	550	0	550	
				0				29938	0	0																	
									0	0																	
												0															
820	218	4813	84	-2383	0	0	0	29938	0	0		0					-1225	0	0	0	0	0	0	2718	2184	550	
																								0	0	0	
				-35532																				0	0	0	
0	0	-4813	0	-1868																				0	0	0	
				0																				0	0	0	
				0																				-50	-50	0	
				0																				0	NA	0	
				0				0																			
										0														0	NA		
																								0		0	
0	0	0	0	-64140				-5766																-525	-525	0	
0	0	-4813	0	-101339				-5766		0														-575	-575	0	
0	0	0	0	-32	0	0	0	0	0	0		0	0	0	0	0											
365	218		7	4807			0	24232	0			0	43652	0	0	91032								2139	1569	550	
	0		7	2403			0	24232	0			0	43652	0	0	91032								2139	1569	550	
	0		0	2403				0	0			0	25938			55021								840	295	550	
													22754			48274								45	NA	45	
			NA																								
																								107	NA	107	
																								0	NA	0	
	0		0	2403				0	0			0	3180			6747								397	0	397	
																								28	NA	28	
																								31	NA	31	
																								34	NA	34	
																								4	NA	4	
																								0	NA	NA	
				2403																				26	NA	26	
				0				0				0	3180			6747								0	NA	NA	
									0															0	NA	0	
	NA								0															0	NA	NA	
			NA	0																				267	0	267	
			7	0				24232				0	16973	NA		34011								1821	1821	NA	
			0				0						144		0									0	0		
			0				0								0												
													144											0	0		
																								277	277	NA	
			0	2403			0								0												
365	218																										
			0	4807			0								0									0	0	0	

ENERGY BALANCES IN INDONESIA CA 1971

	1 TOTAL OF COAL C01-C05 TOE	2 COKING COAL TOE	3 STEAM COAL TOE	4 ANTHRA-CITE TOE	5 LIGNITE TOE	6 TOTAL OF CRUDE OIL C06-C08 KBBL	7 ORIGINAL CRUDE OIL KBBL	8 REDUCED CRUDE OIL KBBL	9 PETROLE-UM PRODUCTS C09-C28	10 DOMESTIC FUEL OIL C10-C20 KKL	11 GASOLINE C11-C14 KKL	12 AVIATION KKL	13 SUPER KKL	14 FRENCH KKL	15 JET FUEL KKL	16 KEROSINE KKL	17 DIESEL C17-C19 KKL	18 AUTOMOT. KKL	19 INDUSTR. KKL	20 HEAVY FUEL OIL KKL	21 NAPHTHA KBBL	22 LOW SUL. WAXY RESIDUE KBBL	23 LUBRI-CANTS KBBL	24 SOLVENTS KBBL
1 DOMESTIC PRODUCTION	199256		199256	0	NA	325648	325648			1011	1	1	0	0	0	823	8	8	0	189			0	0
2 IMPORT	0	0				2529	0	2529		-884	-42	-2		-47	0		0	0	0	-837	0	-27454		0
3 EXPORT	0		0	0		-235585	-235585		(3 (	-2413 (	0) (	0)		(	0)	(	-543 (	-4) (	-529 (	-1859				
4 CONTERNATIONAL BUNKERS																								
5 STOCK CHANGE	-51277	0	-51277	NA	NA	307	0	307		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	146979	0	146979	0	0	88190	85068	2836		125	-48	-1	0	-47	0	823	8	8	0	-657	0	-27454	0	0
7 REFINERY						-93014	-90260	-2814		8432	2017	32	18	1766	164	2362	1848	1154	494	2242	0	26749	13	29
8 BUNKING, LPGS																					0			
9 CHEMICAL ENERGY																								
10 PETROCHEMICAL LPG										-302							-193	-164	-29	-169				
11 PUBLIC UTILITY	0		NA																					
12 PGRP-UP USE										-216							-216	-143	-23	0				
13 AUTO GENERATION	-71836		-71836							-10						0	-10	-1	-9	0				
14 TOWN GAS	0	0	NA																					
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	-71836	0	-71836			-93014	-90260	-2814		7904	2017	32	18	1766	164	2362	1227	816	383	2133	0	26749	13	29
18 CRUDE OIL FIELD						0	NA			0							0	0	0	0				
19 NATURAL GAS FIELD						0	0			0							0	0	0	0	0	0	0	0
20 REFINERY																					0			
21 GSL PLANT																								
22 CHEMICAL ENERGY PLANT										0							0	0	0	0				
23 PUBLIC UTILITY										0							0	0	0					
24 TOWN GAS																								
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	-24518		-24518	NA						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0																
29 ENERGY SECTOR USE LOSSES	-24518	0	-24518	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS TICAL DIFFERENCE	51051	0	51051	0	0	4114	4136	-22		-1309	-254	-11	-2	-242	-16	-141	-120	-42	-66	-747	0	214	0	0
31 FINAL CONSUMPTION	101774		101774	0	0					6721	1714	21	16	1478	146	3024	1108	791	317	729	0		13	29
32 FINAL ENERGY USE	101774		101774	0	0					6721	1714	21	16	1478	146	3024	1108	791	317	729	0			
33 INDUSTRY	53422		53422	0	0					843							520	311	217	311	0			
34 AGRICULTURE FORESTRY										59							40	25	15	19				
35 FISHERY										0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0						97							97	37	60	0				
37 CONSTRUCTION										0							0	0	0	0				
38 MANUFACTURING	53422		53422	0	0					684							391	249	142	292	0			
39 FOODS										117							34	22	12	83				
40 TEXTILE										58							41	27	17	14				
41 RUBBER										42							33	20	13	9				
42 PAPER,PULP										28							9	3	6	19				
43 CHEMISTRY(FUEL USE)										3							0	0	0	3	NA			
44 CERAMICS,CEMENTS	49071		49071		NA					137							30	8	22	107				
45 IRON,STEEL										0							0	0	0	0				
46 NON-FERROUS METALS	0			0						0							0	NA		0				
47 METAL FABRT.,MACHINERY										0							0	0	0	0				
48 SMALL MAKES,OTHERS	4351		4351							298							241	170	29	57				
49 RESIDENT.,COMMER.(TOTAL)										3024						3024								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	48354		48354							2475	1714	21	16	1478	146		429	334	95	346				
53 AIR TRANSPORTATION										166	21	21			146		0	0						
54 ROAD TRANSPORTATION										1593	1693		16	1478			299	246	3	0				
55 RAILWAYS	48354		48354							166							40	38	6	127				
56 INTERNAL NAVIGATION										197	0			0			125	86	39	74				
57 INTERNATIONAL BUNKERS										245	0	0			0		50	4	52	185				
58 OTHERS(GOVERN.,FORCES ET)										182	0	0	0	0	0		151	148	4	31				
59 RAW MATERI. USE IN CHEM.																					NA			
60 OTHER NON-ENERGY USE	0			0																			13	29
61 TOTAL USE IN CHEMISTRY										3							0	0	0	3	0			

25 OTHERS (GREASE, ASPH.,ET) MBBL	26 PETROLE-UM COKE MBBL	27 REFINERY GAS MCF	28 LPG MBBL	29 NATURAL GAS MMCF	30 NGL (CONDEN-SATES) MBBL	31 LNG MM3	32 METHANOL TBN	33 TOWN GAS MM3	34 COKE TBN	35 COKE OVEN GAS MM3	36 BLAST FURNACE GAS MM3	37 BRIQUET TBN	38 WOOD MM3	39 CHARCOAL TBN	40 FUEL ETHANOL FROM BIOMASS TBN	41 AGRI-CULTURAL WASTES MM3	42 MICRO GENERATION PUBLIC UTILITY GWH	43 MICRO GENERATION AUTO GENERAT. GWH	44 NUCLEAR GENERAT-ION GWH	45 GEOTHERM. GENERAT. PUBLIC UTILITY GWH	46 GEOTHERM. GENERAT. AUTO GENERAT. GWH	47 OTHER GENERATION PUBLIC UTILITY GWH	48 OTHER GENERATION AUTO GENERAT. GWH	49 TOTAL OF ELEC-TRICITY GWH	50 PUBLIC UTILITY GWH	51 AUTO GENERAT-ION GWH	52 GRAND TOTAL
				121163									47459	NA	0	90000	1410	0	0	0	0	0	0				
NA			0						0																		
-519					0	0	0								0												
																											( )
0	NA		0						0			0	NA	NA	0												
-519	0		-58	121163	0	0	0		0			0	47459	0	0	90000	1410	0	0	0	0	0	0				
949	188	5847	81																								
			0	-4314	0	0																					
				0	0		0																				
				NA													-2410		0	0		0		2339	2339		
				0														0			0		0	817	0	817	
				0				32527	0	0																	
									0	0																	
												0															
949	188	5847	81	-4314	0	0	0	32527	0	0		0					-2410	0	0	0	0	0	0	3156	2339	817	
				-34885																				0	0	0	
0	0	-5847	0	-1212																				0	0	0	
				0																				0	0	0	
				0																				0	0	0	
				0																				-41	-41	0	
				0				0																0	NA	0	
										0																	
																								0	NA		
																								-152		-152	
0	0	0	0	-26746				-5939																-187	-187	0	
0	0	-5847	0	-112443				-5939		0														-764	-553	-152	
0	0	0	-1	-17	0	0	0	0	0	0		0	0	0	0	0											
439	188		19	4188			0	26588	0			0	43459	0	0	90000								2451	1786	665	
	0		19	2694			0	26588	0			0	43459	0	0	90000								2451	1786	665	
	0		0	2694				0	0			0	28255			51576								972	305	665	
													24389			41503								51	NA	51	
			NA																								
																								114	NA	114	
																								0	NA	0	
	0		0	2694				0	0			0	3875			7073								500	0	500	
																								43	NA	43	
																								56	NA	56	
																								42	NA	42	
																								11	NA	11	
				2694																				0	NA	NA	
				0				0				0	3875			7073								34	NA	34	
									0															0	NA	NA	
	NA																							0	NA	0	
									0															0	NA	NA	
			NA	0																				314	0	314	
			19	0				26588				0	21449	NA		38424								1148	1148	NA	
			0				0						105		0									0	0		
			0				0								0												
													105											0	0		
																								331	331	NA	
			0	2694			0								0												
439	188																										
			0	4188			0								0									0	0	0	

ENERGY BALANCES IN INDONESIA CA 1972

	1 TOTAL OF COAL C01-C05 TOE	2 COKING COAL TOE	3 STEAM COAL TOE	4 ANTHRA-CITE TOE	5 LIGNITE TOE	6 TOTAL OF CRUDE OIL C06-C08 KBBL	7 ORIGINAL CRUDE OIL KBBL	8 REDUCED CRUDE OIL KBBL	9 PETROLE-UM PRODUCTS C09-C20	10 DOMESTIC FUEL OIL C10-C20 MKL	11 GASOLINE C11-C14 MKL	12 AVIATION MKL	13 SUPER MKL	14 PREMIUM MKL	15 JET FUEL MKL	16 KEROSINE MKL	17 DIESEL C17-C19 MKL	18 AUTOMOT. MKL	19 INDUSTR. MKL	20 HEAVY FUEL OIL MKL	21 NAPHTHA KBBL	22 LOW SUL. WAXY RESIDUE KBBL	23 LUBRI-CANTS KBBL	24 SOLVENTS KBBL
1 DOMESTIC PRODUCTION	179249		179249	0	NA	395560	395560																	
2 IMPORT	11885	11885				718	0	718		1392	0	0	0	0	11	395	0	0	0	387			42	1
3 EXPORT	0		0	0		-294148	-294148			-558	0	0		0	0		0	0	0	-558	0	-39508		0
4 (INTERNATIONAL BUNKERS)									( )	(-155)	(0)	(0)			(0)		(0)	(0)	(0)	(-155)				
5 STOCK CHANGE	17246	0	15741	1505	NA	416	0	416		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	208371	11885	194991	1505	0	102576	101412	1164		834	0	0	0	0	11	395	0	0	0	428	0	-39508	42	1
7 REFINERY						-101576	-100412	-1164		7918	1814	29	33	1761	188	2437	2047	1275	772	1431	1980	39658	31	145
8 BUNKERS, LPG)																								
9 CHEMICAL ENERGY																					0			
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA							-259							-188	-148	-40	-72				
12 PUMP-UP USE																								
13 AUTO GENERATION	-23986		-23986							-241							-241	-183	-28	0				
14 TOWN GAS	-11885	-11885	NA							-13						0	-13	-1	-12	0				
15 COKE	0	0																						
16 BRIQUES	0		0																					
17 TRANSFORMATION(TOTAL)	-85871	-11885	-73986			-101576	-100412	-1164		7405	1814	29	33	1761	188	2437	1806	984	642	1359	1980	39658	31	145
18 CRUDE OIL FIELD						0	NA			0							0	0	0	0				
19 NATURAL GAS FIELD																								
20 REFINERY						0	0			0							0	0	0	0	0	0	0	0
21 NGL PLANT																								
22 CHEMICAL ENERGY PLANT																					0			
23 PUBLIC UTILITY										0							0	0	0	0				
24 TOWN GAS										0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	-135410		-135410	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	-135410	0	-135410	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS FICAL DIFFERENCE	55544	0	55544	0	0	-1000	-1000	0		-290	-50	-2	-1	-10	-8	459	-287	169	-346	-1004	-1980	-150	0	0
31 FINAL CONSUMPTION	86654		85149	1505	0					7419	1764	19	32	1714	191	3291	1419	1124	296	783	0		73	147
32 FINAL ENERGY USE	85149		85149	0	0					7419	1764	19	32	1714	191	3291	1419	1124	296	783	0			
33 INDUSTRY	55101		55101	0	0					1658							584	355	230	469	0			
34 AGRICULTURE FORESTRY										61							45	33	12	16				
35 FISHERY										0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0						189							98	49	57	3				
37 CONSTRUCTION										0							0	0	0	0				
38 MANUFACTURING	55101		55101	0	0					892							442	281	160	450	0			
39 FOODS										128							48	34	13	80				
40 TEXTILE										104							72	37	40	29				
41 RUBBER										55							42	25	17	13				
42 PAPER,PULP										36							11	6	5	25				
43 CHEMISTRY(NON USE)										87							5	5	0	82	NA			
44 CERAMICS,CEMENTS	54303		54303		NA					225							45	8	37	180				
45 IRON,STEEL										9							6	3	0	5				
46 NON-FERROUS METALS	0			0						0							0	NA		0				
47 METAL PROD.,MACHINERY										0							0	0	0	0				
48 SMALL VALUES,OTHERS	4710		4710							265							210	184	47	55				
49 RESIDENT.,COMMER.(TOTAL)										3291						3291								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	30848		30848							2816	1741	19	32	1714	191		692	843	47	270				
53 AIR TRANSPORTATION										269	19	19			191		0	0						
54 ROAD TRANSPORTATION										2494	1748		32	1714			449	845	3	0				
55 RAILWAYS	30848		30848							841							34	33	1	107				
56 INTERNAL NAVIGATION										217	0			0			209	164	45	0				
57 INTERNATIONAL BUNKERS										155	0	0			0		0	0	0	155				
58 OTHERS(GOVERN.,FORCES 3)										188	0	0	0	0	0		143	126	12	44				
59 NON MATERI. USE IN CHEM.																					NA			
60 OTHER NON-ENERGY USE	1505			1505																			73	147
61 TOTAL USE IN CHEMISTRY										87							5	5	0	82	0			

25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
DISTILLATE (GREASE, ASPH.,ETC) MBBL	PETROLEUM COKE MBBL	REFINERY GAS BCF	LPG MBBL	NATURAL GAS BNCF	NGL (CONDENSATES) MBBL	LNG MM3	METHANOL TBM	TOWN GAS MM3	COKE TCM	COKE OVEN GAS MM3	BLAST FURNACE GAS MM3	BRIQUES TBM	WOOD MM3	CHARCOAL TBM	FUEL ETHANOL FROM BIOMASS TOM	AGRI-CULTURAL WASTES MM3	HYDRO GENERATION PUBLIC UTILITY GWH	HYDRO GENERATION AUTO GENERAT. GWH	NUCLEAR GENERAT-ION GWH	GEOTHERM. GENERAT. PUBLIC UTILITY GWH	GEOTHERM. GENERAT. AUTO GENERAT. GWH	OTHER GENERATION PUBLIC UTILITY GWH	OTHER GENERATION AUTO GENERAT. GWH	TOTAL OF ELEC-TRICITY GWH	PUBLIC UTILITY GWH	AUTO GENERAT-ION GWH	GRAND TOTAL
				150767									53421	NA	0	84355	1293	0	0	0	0	0	0				
168			0						0						0												
-498					0	0	0																				( )
0	NA		0						0			0	NA	NA	0												
-323	0		-28	150767	0	0	0		0			0	53421	0	0	84355	1293	0	0	0	0	0	0				
8881	576	3288	71																								
			0	-8888	0	0																					
				0	0		0																				
				NA													-1293		0	0		0		2519	2519		
				0				38037	0	0								0			0		0	897	0	897	
				0					0	0																	
												0															
8881	576	3288	71	-8888	0	0	0	38037	0	0		0					-1293	0	0	0	0	0	0	3416	2519	897	
																								0	0	0	
				-30654																				0	0	0	
0	0	-3288	0	-1628																				0	0	0	
				0																				0	0	0	
				0																				-74	-74	0	
				0				0																0	NA	0	
				0						0														0	NA		
																								-357		-157	
0	0	0	0	-102919				-8745																-552	-552	0	
0	0	-3288	0	-134796				-8745		0														-784	-626	-157	
0	0	0	0	-465	0	0	0	0	0	0		0	0	0	0	0											
878	576		43	8818			0	29892		0		0	53421	0	0	84355								2633	1893	740	
	0		43	8818			0	29092		0		0	53421	0	0	84355								2633	1893	740	
	0		0	4409				0		0		0	27922 23017			48138 35372								1653 59	312 NA	740 59	
			NA																					116	NA	116	
																								0	NA	0	
	0		0	4409				0		0		0	4910			7761								581 62 93 53 11 8	0 NA NA NA NA NA	581 62 93 53 11 8	
				4409 0				0		0		0	4910			7761								55 5 0 0	NA NA NA NA	55 5 0 NA	
	NA									0														200	0	200	
			NA	0																							
			43	0				29892				0	25416	NA		40217								1230	1230	NA	
			0					0					48		0									0	0		
			0					0					48		0									0	0		
																								350	350	NA	
			0	4409				0							0												
878	576																										
			0	8818				0							0									0	0	0	

ENERGY BALANCES IN INDONESIA CA 1973

	1 TOTAL OF COAL C01-C03 TOE	2 COKING COAL TOE	3 STEAM COAL TOE	4 ANTHRA-CITE TOE	5 LIGNITE TOE	6 TOTAL OF CRUDE OIL C06-C09 KBBL	7 DISTILLAT. CRUDE OIL KBBL	8 REDUCED CRUDE OIL KBBL	9 PETROLE-UM PRODUCTS C07-C20	10 DOMESTIC FUEL OIL C10-C20 KBL	11 GASOLINE C11-C14 KBL	12 AVIATION KBL	13 SUPER KBL	14 PREMIUM KBL	15 JET FUEL KBL	16 KEROSINE KBL	17 DIESEL C17-C19 KBL	18 AUTOMOT. KBL	19 INDUSTR. KBL	20 HEAVY FUEL OIL KBL	21 NAPHTHA KBBL	22 LOW SUL. WAXY RESIDUE KBBL	23 LUBRI-CANTS KBBL	24 SOLVENTS KBBL
1 DOMESTIC PRODUCTION	148926		145470	3356	NA	488536	488536																	
2 IMPORT	2590	2590				978	0	978		1849	0	0	0	0	322	310	246	246	0	1863			47	11
3 EXPORT	0		0	0		-369543	-369543			-17	0	0		0	0		0	0	0	-17	0	-53780		0
4 INTERNATIONAL BUNKERS									( )	(-175)	(0)	(0)			(0)		(0)	(0)	(0)	(-175)				
5 STOCK CHANGE	33707	0	33797	-90	NA	907	0	907		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 PRIMARY ENERGY SUPPLY	185123	2590	179267	3266	0	120078	118993	1885		1791	0	0	0	0	322	310	246	246	0	1846	0	-53780	47	11
7 REFINERY						-120540	-118655	-1885		8207	2016	5	41	1980	153	3180	2370	1723	446	540	1061	53404	32	180
8 BRICKS, LPG)																								
9 CHEMICAL ENERGY																					0			
10 PETROCHEMICAL LPG																								
11 PUBLIC UTILITY	0		NA							-327							-246	-198	-49	-81				
12 PUMP-UP USE																								
13 AUTO GENERATION	-48195		-48195							-313							-313	-210	-74	0				
14 TOWN GAS	-2590	-2590	NA							-16						0	-16	-1	-15	0				
15 COKE	0	0																						
16 BRIQUET	0		0																					
17 TRANSFORMATION(TOTAL)	-50785	-2590	-48195			-120540	-118655	-1885		7552	2016	5	41	1980	153	3180	1795	1306	483	459	1061	53404	32	180
18 CRUDE OIL FIELD						0	NA			0							0	0	0	0				
19 NATURAL GAS FIELD																								
20 REFINERY						0	0			0							0	0	0	0	0	0	0	0
21 BRI. PLANT																								
22 CHEMICAL ENERGY PLANT																					0			
23 PUBLIC UTILITY										0							0	0	0	0				
24 TOWN GAS										0							0	0	0					
25 COKE PLANT																								
26 BRIQUET																								
27 COAL MINE	-13678		-13678	NA																				
28 FLARE AND LOSSES	0	0	NA	NA	NA	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29 ENERGY SECTOR USE LOSSES	-13678	0	-13678	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 STATIS TICAL DIFFERENCE	-33709	0	-32843	-904	0	-338	-338	0		-697	-97	-2	-3	-92	-48	276	-177	-48	-129	-688	-1061	376	0	0
31 FINAL CONSUMPTION	84951		84591	2360	0					8645	1919	3	58	1888	264	3685	1863	1504	359	884	0		79	180
32 FINAL ENERGY USE	84591		84591	0	0					8645	1919	3	58	1889	264	3685	1863	1504	359	884	0			
33 INDUSTRY	45207		45207	0	0					1783							754	475	279	530	0			
34 AGRICULTURE FORESTRY										77							59	44	14	18				
35 FISHERY										0							0	0						
36 MINING(EX.ENERGY SEC.)	0		0	0						126							123	54	70	3				
37 CONSTRUCTION										0							0	0	0	0				
38 MANUFACTURING	45207		45207	0	0					1480							571	377	195	508	0			
39 FOODS										153							62	46	16	93				
40 TEXTILE										131							98	47	49	33				
41 RUBBER										69							54	33	21	15				
42 PAPER,PULP										42							14	8	6	28				
43 CHEMISTRY(FUEL USE)										77							7	7	0	70	NA			
44 CERAMICS,CEMENTS	40186		40186		NA					259							56	10	45	201				
45 IRON,STEEL										11							5	5	1	6				
46 NON-FERROUS METALS	0			0						0							0	NA		0				
47 METAL FABRI.,MACHINERY										0							0	0	0	0				
48 SMALL WARES,OTHERS	5021		5021							338							276	249	57	62				
49 RESIDENT.,COMMER.(TOTAL)										3685						3685								
50 RESIDENTIAL																								
51 COMMERCIAL																								
52 TRANSPORTATION(TOTAL)	39384		39384							3168	1780	3	57	1840	264		920	848	59	308				
53 AIR TRANSPORTATION										267	3	3			264		0	0						
54 ROAD TRANSPORTATION										2292	1697		57	1840			690	596	8	0				
55 RAILWAYS	39384		39384							166							45	41	1	121				
56 INTERNAL NAVIGATION										283	0			0			274	220	54	9				
57 INTERNATIONAL BUNKERS										175	0	0			0		0	0	0	175				
58 OTHERS(GOVERN.,FORCES ET)										459	240	0	1	240	0		190	169	21	50				
59 RAW MATERI. USE IN CHEM.																					NA			
60 OTHER NON-ENERGY USE	2360			2360																			79	180
61 TOTAL USE IN CHEMISTRY										77							7	7	0	70	0			

25 OTHERS (GREASE, ASPH.,ET) BBL	26 PETROLE-UM COKE MBBL	27 REFINERY GAS BCF	28 LPG MBBL	29 NATURAL GAS MMCF	30 NGL (CONDEN-SATES) MBBL	31 LNG MM3	32 METHANOL TBN	33 TOWN GAS MM3	34 COKE TON	35 COKE OVEN GAS MM3	36 BLAST FURNACE GAS MM3	37 BRIQUET TBN	38 WOOD MM3	39 CHARCOAL TBN	40 FUEL ETHANOL FROM BIOMASS TON	41 AGRI-CULTURAL WASTES MM3	42 HYDRO GENERATION PUBLIC UTILITY GWH	43 HYDRO GENERATION AUTO GENERAT. GWH	44 NUCLEAR GENERAT -ION GWH	45 GEOTHERM. GENERAT. PUBLIC UTILITY GWH	46 GEOTHERM. GENERAT. AUTO GENERAT. GWH	47 OTHER GENERATION PUBLIC UTILITY GWH	48 OTHER GENERATION AUTO GENERAT. GWH	49 TOTAL OF ELEC-TRICITY GWH	50 PUBLIC UTILITY GWH	51 AUTO GENERAT -ION GWH	52 GRAND TOTAL
				186137									59157	NA	0	18887	1385	0	0	0	0	0	0				
71			0						0																		
-649					0	0	0								0												
0	NA		0						0			0	NA	NA	0												
-578	0		-3	186137	0	0	0		0			0	59157	0	0	18887	1385	0	0	0	0	0	0				
1269	169	7618	184																								
			0	-2201	0	0																					
				0	0		0																				
				NA													-1385		0	0		0		2959	2959		
				0														0			0		0	1865	0	1865	
				0				38692	0	0																	
									0	0																	
												0															
1269	169	7618	184	-2201	0	0	0	38692	0	0		0					-1385	0	0	0	0	0	0	4823	2959	1865	
				-39317																				0	0	0	
0	0	-7618	0	-1676																				0	0	0	
				0																				0	0	0	
				0																				0	0	0	
				0																				-65	-65	0	
				0				0																0	NA	0	
										0																	
																								0	NA		
																								-184		-184	
0	0	0	0	-132841				-10113																-699	-699	0	
0	0	-7618	0	-173883				-10113		0														-883	-784	-184	
0	0	0	0	3766	0	0	0	0	0	0		0	0	0	0	0											
691	169		181	8818			0	28569	0			0	59157	0	0	18887								3136	2175	961	
	0		181	4959			0	28569	0			0	59157	0	0	18887								3136	2175	961	
	0		0	4437				0	0			0	31756			53475								1474	535	961	
													27580			45113								78	NA	78	
			NA																								
																								148	NA	148	
																								0	NA	0	
	0		0	4437				0	0			0	4176			6982								735	0	735	
																								82	NA	82	
																								120	NA	120	
																								48	NA	48	
																								18	NA	18	
				4459																				10	NA	10	
				0				0				0	4176			6982								62	NA	62	
									0															7	NA	7	
	NA																							0	NA	0	
									0															0	NA	NA	
			NA	0																				369	0	369	
			181	0				28569				0	27380	NA		45792								1348	1348	NA	
			0				0						14		0									0	0		
			0				0								0												
													11											0	0		
																								294	294	NA	
			0	4459			0								0												
691	169																										
			0	8818			0								0									10	0	10	