

“National Greenhouse and Energy Reporting System”

Submission from Rod Fletcher, 13/2/2008

Ref:

<http://www.greenhouse.gov.au/reporting/publications/pubs/nger-techguidelines-overview.pdf>

The reporting, that is the focus of “National Greenhouse and Energy Reporting System”, misses the most significant issue and that is that “greenhouse” is just one SYMPTOM of many. We must be addressing the CAUSE. Attempting to address the cause by implementing a recording system that has the extremely narrow focus of addressing a single symptom clearly has a very high probability of failing.

In the near future it shall be a requirement of the international community that we address “cause” and so it would greatly benefit us to move in this direction now.

The CAUSE of greenhouse, water shortages, water pollution, loss of fertile lands, loss of fish stock, etc, etc, is natural resource over-use; that is natural resource use **beyond that which is sustainable**.

Persevering with a recording system with the SYMPTOM focus of this document shall mean that we shall be having recording systems on recording systems to address the large number of symptoms already apparent and the almost infinite number of symptoms that are shall reveal themselves as we further deplete earth’s natural resources.

With this in mind, and suspecting that the above will not be taken on board, I submit the following comments:

Listed Fuel types, Appendix A

Inappropriate categories in Appendix A; Categorised so as not to reflect the reality of natural resource depletion.

With respect to “Production of fossil fuels and biofuels” and “Production of fossil fuels for non-energy product purposes” Clearly NO ONE is producing fossil fuels; they are being extracted, used, burnt but not “produced”; they are limited natural resources.

Recommended categories could be headed “Use/or Destruction of fossil fuels“ I prefer the word “Use” to fit the Produce Use Sustainability Index (refer below). Sustainable or renewable fuels should be listed under separate heading(s).

List of Equipment types:

To “Thermal equipment” add “Solar furnace”.

To “Chemical” add “Photo Chemical”

Under “**Renewable energy electricity generation equipment**” is the non-renewable “Geothermal”; one must understand the appropriate system analysis, oil and coal are as renewable as Geothermal.

Photosynthesis derived sources are renewable and should be included.

Again I would recommend these equipment types be divided into sustainable and non-sustainable, should the list be deemed necessary at all.

Suggested outline of ‘fuels’ table below:

Non-sustainable Solid Fuels:	Extracted	Burnt	Units
Black coal			tonnes
Lignite—brown coal			tonnes
Coking coal (metallurgical coal)			tonnes
Other			tonnes
Brown coal briquettes			tonnes
Coke oven coke			tonnes
Coal by-products (coal tar and BTX)			tonnes
Potentially sustainable Solid Fuels:			
Municipal materials recycled for energy (non biomass)			tonnes
Wood/wood waste (dry)			tonnes
Sulphite lyes (black liquor)			tonnes
Bagasse (other primary solid biomass)			tonnes
Other primary solid biomass (other than bagasse)			tonnes
Municipal materials recycled for energy (biomass)			tonnes
Charcoal			tonnes
Non-Sustainable Gaseous fuels			
Natural gas			Cubic metres
Natural gas—coal seam methane			
Natural gas—coal mine waste gas—captured for combustion			
Compressed natural gas			
Other (non-commercial)			
Ethane			
Coke oven gas			
Blast furnace gas			
Natural gas—town gas			
Liquefied natural gas			
Other			
Potentially Sustainable Gaseous fuels			
Landfill gas—captured for combustion for energy			
Sludge gas (sewage gas) —captured for combustion for energy			
Non-Sustainable Liquid fuels			
Crude oil (crude and condensates)			Thousand litres
Other natural gas liquids Tonnes			
Motor gasoline (petrol)			
Aviation gasoline			
Aviation turbine fuel (jet kerosene)			
Kerosene			
Heating oil			
Diesel (Automotive Diesel Oil)			
Fuel oil			
Lubricants and greases			
Liquefied aromatic hydrocarbons (benzene, toluene, and xylene)			

Solvents			
Sustainable Liquid fuels			

To prepare a more appropriate document we need to have a realistic philosophy:

What means sustainable? The general reliance is on World Commission on Environment and Development (WCED) definition. This suggests that sustainability is defined as "forms of progress that meet the needs of the present without compromising the ability of future generations to meet their needs."

This is quite nebulous and totally incomprehensible to most because of our fatally flawed economic system. The economic system is a system that ignores scientific realities and draws us in a totally destructive direction.

If we perform an Earth system analysis we see that the major inputs are solar radiation and solar and lunar gravitational forces. Further to comply with WCED natural resources, that have accumulated over hundreds of thousands of years, must be left in sufficient and accessible forms to meet the needs of future generations.

We could estimate the future number of generations and the number of years access to natural resource shall be needed but it is highly improbable that our estimate would be accurate; could be 300 years (life of coal reserves at current rates of usage), 10,000 years (estimated average species life), or 1,000,000 years (the sun and moon are highly likely to be still in orbit).

The best option, a practical option, is to comply with the Produce Use Sustainability Index (PUSI): for an activity the time to Produce a natural resource must be less than or equal to the time in which it is Used. i.e. $P(t)/U(t) < \text{or} = 1$.

We generally have the technologies to comply with PUSI and the intelligence to refine these; the reason we do not use these technologies is because of a fatally flawed economic model that ignores the finite nature of planet Earth and ignores the needs of future generations. (An alternative reality based economic system that could enable continued growth is available).

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