Energimyndigheten

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2009-03-16

Systemanalysavdelningen
Enheten för energimarknader och tillförsel
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Re: InterEnerStat Consultation on Harmonisation of Definitions of Energy Products and Flows.

InterEnerStat should be congratulated on the progress on harmonisation. This work is very important. It also seems to be in reach to find common definitions thanks to the impressive work done by Mr. Simmons.

As has been noted by Australia however, the definitions are not, in the current format, suitable for a statistical classification.

In one area, biomass, there is a proposal for a hierarchical classification scheme, which should be developed further.

I submit a proposal for classification/fuel hierarchy for biomass/biofuels that is currently under discussion in Sweden. This is NOT a final proposal for a Swedish classification, but it could be shown as an example that biomass is very local, and that needs for classification of biomass for energy purposes will differ depending on location/vegetation and on how developed the bioenergy markets are.

01 Biobränsle/Biofuels
01.1 Fast biobränsle/Solid Biofuels
01.1.1 Trädbränsle/Wood fuels
01.1.1.1 Oförädlat trädbränsle/Non-refined wood fuels
01.1.1.1.1 Avverkningsrester (grot, stubbar)/Forestry residues (branches, stumps)
01.1.1.1.2 Rundved för eldningsändamål/Roundwood (timber) for energy purposes
01.1.1.1.3 Energiskogsbränsle/Woody energy crops (salix)
01.1.1.1.4 Biprodukter från skogsindustrin/Other by-products from the forestry industry
01.1.1.1.5 Återvunnet trä/Recycled wood
01.1.1.1.6 Övrigt oförädlat trädbränsle/Other non-

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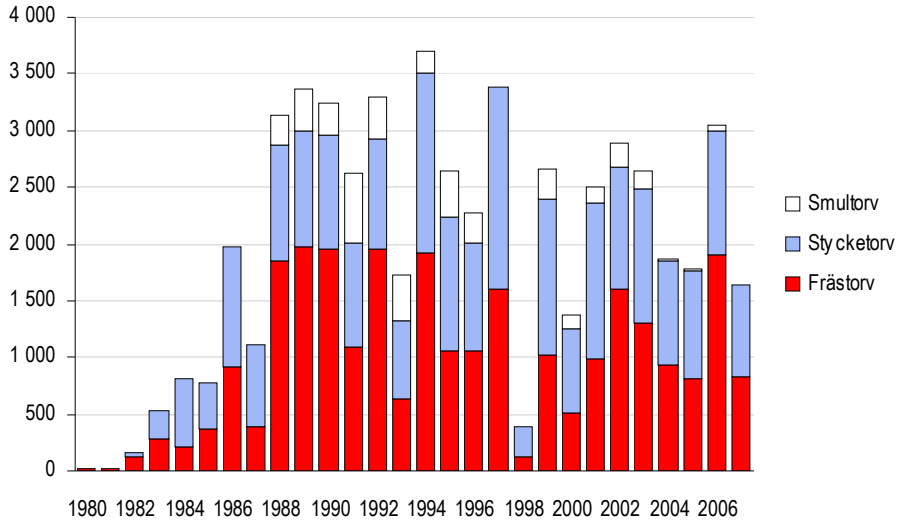
		refined wood fuels
	01.1.1.2 Förädlat trädbränsle/Refined wood fuels	
		01.1.1.2.1 Träpellets/Pellets
		01.1.1.2.2 Träbriketter/Briquettes
		01.1.1.2.3 Träpulver/Wood Powder
		01.1.1.2.4 Övriga förädlat trädbränsle/Other refined wood fuels
	01.1.2 Jordbruksrester/Agricultural residues	
		01.1.2.1 Halm/Straw
		01.1.2.2 Övriga restprodukter från jordbruket/Other agricultural residues
	01.1.3 Energigrödor/Energy crops (non-woody)	
		01.1.3.1 Spannmål/Grain
		01.1.3.2 Oljeväxter (för FAME)/Oil plants
		01.1.3.3 Hampa/Hemp
		01.1.3.4 Rörflen/Reed Canary Grass
		01.1.3.5 Övriga energigrödor/Other energy crops
	01.1.4 Brännbart avfall/Solid wastes	
		01.1.4.1 Hushållsavfall (förnybart)/Solid municipal wastes (renewable fraction)
		01.1.4.2 Övrigt avfall (förnybart)/Other solid wastes (renewable fraction)
01.2 Flytande biobränsle/Liquid biofuels		
	01.2.1 Bioalkoholer/Bioalcohols	
		01.2.1.1 Bioetanol/Bioethanol
		01.2.1.2 Övriga bioalkoholer/Other bioalcohols
	01.2.2 Biooljor/Biooils	
		01.2.2.1 FAME/FAME
		01.2.2.2 Tall- och tallbeckolja/Tall oil and tall pitch oil
		01.2.2.3 Övriga biooljor/Other biooils
	01.2.3 Avlutar/Black liquor	
01.3 Gasformiga biobränslen/Gaseous biofuels		
	01.3.1 Deponigas/Landfill gas	
	01.3.2 Rötgas/Sewage sludge gas and bioreactor gas	
	01.3.3 Övrig biogas/Other biogas (incl. syngases and DME)	

Specific comments on some of the categories

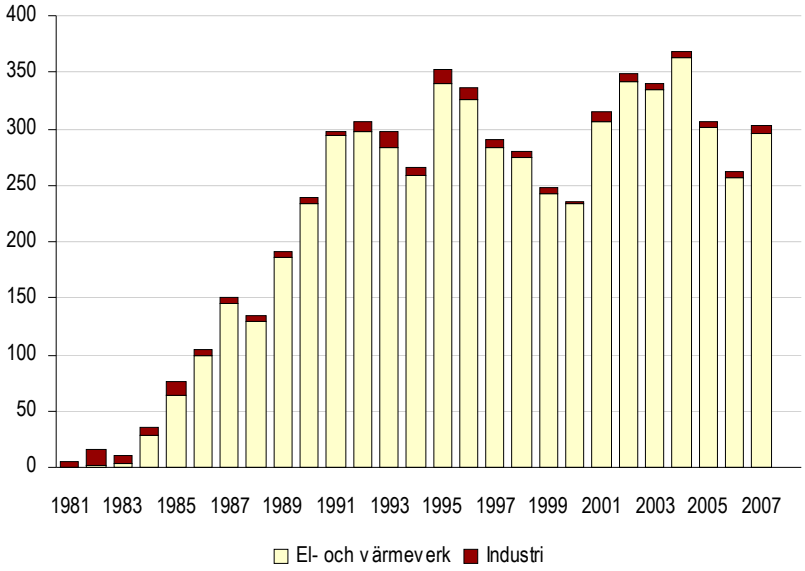
Peat

Peat should, as has been proposed, constitute its own category fuel. It is not coal, it is not fossil, and it is not renewable. Simply put, peat is peat.

It is **not true** that peat slabs are mostly used as a household fuel. For Swedish and Finnish conditions, milled peat AND peat slabs (Swedish: frästorv and stycketorv respectively) is used in CHP and District Heating Plants, almost exclusively. Household use in Sweden is, I would say, almost non-existent.



Figur 1: Enegy peat harvest in Sweden 1980-2007 in m3. Variations are due mainly to weather conditions. "Stycketorv" = Peat slabs. "Frästorv/Smultorv" = Milled peat.



Figur 2. Energy peat use in Sweden 1981-2007 in 1000 toe. "El- och värmeverk" = CHP and District Heating plants. "Industri" = Industrial applications.

Liquid biofuels

The proposed subcategories are biogasoline and biodiesel.

In the above listed Swedish proposal, which is under discussion, we have proposed **bioalcohols** and **biooils** respectively.

Biooils are also used for heating purposes, not only in diesel engines.

The categories proposed should preferably emanate from the fuel characteristics (heating values, chemical composition) and then they can be found in different sectors for respective use.

As the proposal is put forward now, the liquid biofuels are categorized according to sectoral use already from the start.

Additives/Oxygenates

Ethanol/Methanol (se above under Liquid biofuels) is also used as an additive/oxygenate (e.g. in 5-10% blended petrol). It should be counted/accounted for as a biofuel in most cases, and double-counting should be avoided.

This is also true for RME, which is a special case of FAME.

Perhaps this category should only include additives/oxygenates not elsewhere included/reported.

/Paul Westin