

## Memorandum

14 June 2011

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Ministry of Enterprise, Energy and Communications Sweden

### Sweden's response to the public consultation on accounting methods and conditions for the 10% renewable energy in transport target

#### Sweden's answers in bold.

*Section A: According to the National Renewable Energy Action Plans, Member States estimate that the contribution of renewable electricity will by 2020 account for approximately 1% of energy consumed in transport: 0.8% in non-road transport (mainly in trains) and 0.2% in road transport, including electric cars, trolleybuses, etc. Given that electricity is generated from both renewable as well as non-renewable sources,*

*1. how do you value the impact of the 10% target for renewable energy in transport by 2020 on the development of electric vehicles?*

- **Not significant**
- *Significant, but other policies/developments will be of more importance*
- *Important, along with other policies/developments*
  - *A key driver*

Comment: According to the NREAP, renewable electricity will account for just 2% of energy used in road vehicles in 2020, which means that most countries do not envisage its use increasing significantly by 2020. Electric vehicles will not

therefore contribute significantly towards reaching the 10% target.

*2. under what condition do you think it would be justified to count the whole amount of electricity in electric vehicles as renewable?*

- **None**
- *When the electricity is produced fully from renewable energy and without connection to the electricity grid*
- *When the electricity comes with a tradable certificate showing that that amount of renewable electricity was generated*
- *When there is a supply contract showing that that amount of renewable electricity was generated*
- *When there is evidence on a Member State level that the development of electric vehicles has led to that amount of additional renewable electricity generation*
- *Other (please specify):*

Comment: The current practice of calculating the amount of renewable energy is adequate (that is, based on the EU-average domestic alternative electricity mix). Establishing a system capable of taking the actual electricity source into account would probably create a very heavy administrative burden. Furthermore, the benefit of any such system would be limited to calculating the proportion of the 10% target expected to be met by electricity use in road vehicles. It would probably be difficult enough to even gather statistics on the amount of electricity used by electric road vehicles. It is essential that Eurostat develop a method for measuring the amount of electricity used by road vehicles.

*3. what benefits do you expect the option you selected under (2) will have:*

- *Additional renewable electricity generation*
- *Faster development of electric vehicles*
- *Other (please specify):*
- **None, it only changes the accounting method**

*4. what costs in terms of administrative burden do you expect the implementation of the option you selected under (2) will have:*

- *Additional statistics collection in all Member States*
- *Generating additional information on the basis of existing statistics*
- *Other (please specify):*
- **None**

***Section B: Hydrogen from renewable sources in transport***

### ***Section C: Biomethane via the natural gas grid in transport***

*According to the National Renewable Energy Action Plans, Member States estimate that biofuels other than first and second generation bioethanol and biodiesel will by 2020 account for approximately 0.2% of energy consumed in transport, part or all of which may be biomethane. Given that methane in the gas grid originates mostly from non-renewable sources (natural gas),*

*1. how do you value the impact of the 10% target for renewable energy in transport by 2020 on the development of methane vehicles fuelled by methane from the gas grid?*

- *Not significant*
- **Significant, but other policies/developments will be of more importance**
- *Important, along with other policies/developments*
- *A key driver*

Comment: In Sweden biogas should make a relatively large contribution to meeting the 10% target by 2020, according to the forecast on which the Swedish NREAP is based. There are many reasons to support biogas production and biogas vehicles, not only the existence of a renewable target. However, it is important that the 10% target include biogas so that Sweden can be credited for the progress made in this regard.

*2. under what condition do you think it would be justified to count the whole amount of methane extracted from the gas grid for the use in vehicles as renewable?*

- *None, until the time that all methane injected into the gas grid concerned is originating from renewable sources*
- **When the methane comes with a tradable certificate showing that that amount of biomethane was generated**
- **When there is a supply contract showing that that amount of biomethane was generated**
- *When there is evidence on a Member State level that the development of methane vehicles has led to that amount of additional biomethane generation*
- *Other (please specify):*

Comment: Sweden's tax legislation does not yet have a system for that, because biogas is taxed differently from natural gas. There is an agreement giving customers tax exemptions for fuels produced from biogases. We do not actually perform the tax assessment ourselves but subcontract the work. This corresponds to the abovementioned 'supply contract'. 'Tradable

certificates' should be an alternative method for other countries within the EU.

*3. what benefits do you expect the option you selected under (2) will have:*

- **Additional biomethane generation**
- *Faster development of methane vehicles*
- *Other (please specify):*
- *None, it only changes the accounting method*

Comment: In Sweden the possibility to be credited for biogas which is fed in the natural gas network could be an incentive to produce more biogas. (However, complementary national measures are necessary, as the 10% target will not directly lead to increased biogas production.

*4. what costs in terms of administrative burden do you expect the implementation of the option you selected under (2) will have:*

- *Additional statistics collection in all Member States*
- *Generating additional information on the basis of existing statistics*
- **Other (please specify):**
- *None*

Comment: An administrative system to handle the certification of alternative contracts will be needed. Statistics on biogas could be gathered in the context of the sustainability criteria.

#### ***Section D: Energy content of biofuels***

*According to the National Renewable Energy Action Plans, Member States estimate that the contribution of biofuels will be approximately 9.5% of energy consumed in transport, most of which is expected to be biodiesel and bioethanol.*

*1. Do you think additional types of biofuels need to be listed in Annex III of the*

*Directive? If yes, which ones and could you provide values?*

Comment: No, although we do not have values for liquid biofuels other than biofuels used in transport.

*2. Do you think more precision in terms of decimals is necessary in the values in the Annex? If yes, could you provide such values?*

Comment: Yes, one decimal place would have made the calculations more precise. In Sweden's energy statistics, we use the following decimals for biofuels: Ethanol: 21.2 MJ/l Biodiesel/FAME: 33.0 MJ/l