

MEMO

Subject: Your input requested – studies on industrial carbon efficiencies
Date: August 1st 2012
From: [REDACTED] Senior Consultant Ecofys, Industrial Processes

Dear sir/madam,

Ecofys – as subcontractor for the Öko Institute – provides support to the European Commission on the preparatory work for the upcoming determination of the carbon leakage list valid for the period 2015-2019. As you may know, Article 10a(18) of the ETS Directive requires that the list of sectors or subsectors deemed to be exposed to a significant risk of carbon leakage shall be determined after taking into account, where the relevant data is available, the extent to which third countries, representing a decisive share of global production of products in the sectors and subsectors concerned, firmly commit to reducing greenhouse gas emissions in the relevant sectors and also the extent to which the carbon efficiency of installations located in third countries is comparable to that of the Community. In the framework of the project and as part of the assessment carried out by the Commission under Article 10a(18) of the ETS Directive, Ecofys assesses literature to provide ideas and possible conclusions on international differences in industrial carbon efficiencies worldwide to the extent that the data allow doing so.

In this respect, we would like to kindly ask for your input in two areas:

- 1). Data availability
- 2). Completion of the list of assessed comparative literature

The scope of this assessment is limited to:

- (1) Studies providing ready to use data (no data processing needed) based on the situation in 2000 or later
- (2) Studies concerning greenhouse gas/CO₂ efficiency and/or energy intensity/specific energy consumption (not: potentials)
- (3) Studies of the industry (preferably split up into different sectors)



Ecofys is currently only assessing comparative studies in which the carbon efficiencies of industrial sectors of at least 2 countries is compared, but knowledge of data availability for individual countries¹ could be valuable as well and therefore questions on data availability from single country sources are therefore included in this questionnaire. In this full questionnaire, the EU is referred to as one "country".

Could you be so kind to return this filled-in questionnaire at latest August 31st to [b\[REDACTED\]@ecofys.com](mailto:b[REDACTED]@ecofys.com)?

We kindly ask for your understanding that Ecofys unfortunately is not in a position to discuss the inclusion of sources with you.

Thank you in advance,

[REDACTED]

Senior Consultant Ecofys

¹ Some ideas, apart from the EU, may be Australia, Brazil, Canada, China, India, Indonesia, Japan, Russian Federation, South Africa, South Korea, United States of America.

Question 1):

How would you in general evaluate the availability of data on industrial carbon efficiency differences between countries?

- ☐ A). Studies comparing carbon efficiencies of multiple countries are present for most/all industrial sectors
- ☐ B). Studies comparing carbon efficiencies of multiple countries are present for a limited number of key energy intensive studies
- ☐ C). Studies comparing carbon efficiencies of multiple countries are scarce, and coverage is scattered

Choose A), B) or C).

Only in case you represent an industrial sector organisation:

Question 1b):

How would you evaluate the availability of data on industrial carbon efficiency differences between countries for the sector you represent?

- ☐ A). *Studies comparing carbon efficiencies of multiple countries are present for the sector I represent.*
- ☐ B). *Studies comparing carbon efficiencies of multiple countries are not present for the sector I represent.*

Choose A) or B).

Question 2):

Would you be so kind to add *comparative* literature sources we might not have identified yet in the table below, to ensure that we have a list as complete as possible?

COMPARATIVE SOURCES					
Author(s) / Organisation	Title	Year	Industry (sub)sectors covered	Availability (Public / Scientific / Closed) ²	Internet link
TNO Built Environment and Geosciences	Greenhouse gas efficiency of industrial activities in EU and Non-EU	2009	Iron&Steel, Non ferrous metals, (petro)chemical, pulp&paper, non-metallic minerals	Public	http://ec.europa.eu/clima/policies/ets/leakage/docs/bmsh_6_11_09_tno_report_en.pdf
International Energy Agency (IEA)	Tracking Industrial Energy Efficiency and CO ₂ Emissions	2007	(petro)chemical, non-metallic minerals, pulp&paper, non-ferrous metals	Public	http://www.iea.org/textbase/nppdf/free/2007/tracking_emissions.pdf
United Nations Industrial Development Organization (UNIDO)	Global Industrial Energy Efficiency Benchmarking	2010	Refinery, (petro)chemical, non-ferrous metals, non-metallic minerals, pulp&paper, foundries, textiles	Public	http://www.unido.org/fileadmin/user_media/Services/Energy_and_Climate_Change/Energy_Efficiency/Benchmarking_%20Energy_%20Policy_Tool.pdf
International Aluminium Institute (IAI)	Current IAI Statistics 2010	2011	Metallurgical / Primary aluminium production	Public	http://www.world-aluminium.org/Statistics/Current+statistics
World Business Council for Sustainable Development – Cement Sustainability Initiative (CSI)	Global Cement Database on CO ₂ and Energy Information	2009	Cement	Public	http://wbcsdcement.org/GNR-2009/index.html
the Economist Intelligence Unit/Enerdata	Trends in global energy efficiency 2011, an	2011	Steel, paper, aluminium	Public	http://www.abb.com/product/ap/db0003db004052/a2b8f9d201f24e4ac1257

² Public literature is available free of cost (for example on internet), Scientific literature is available at limited cost (from library services). Closed literature is only available at cost (for example yearly fees, or by participation), and will only be listed not be assessed. Please feel free to add closed literature as well.



	analysis of industry and utilities				84d0057ace4.aspx
Saygin et al.	Potential of best practice technology to improve energy efficiency in the global chemical and petrochemical sector	2011	Chemical	Scientific	
Please add					
Please add					
Please add					
Please add					
Please add					
Please add					
Please add					

Question 3):

How would you in general evaluate the availability of data on industrial carbon efficiency for individual countries³ (no comparative literature)?

- ☐ A). National data is present for most countries and for most sectors
- ☐ B). Coverage of national data is scattered (some national studies, for some sectors)

Choose A) or B).

Question 4):

Please list sectors for which data on their carbon efficiency is available in at least 3 single-country⁴ sources (including EU):

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Only in case you represent an industrial sector organisation:

Question 4b):

Please describe the availability of data from non-comparative sources for the sector you represent:

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Question 5):

Please list countries⁵ of which data on industrial carbon efficiency is (well) available for the sectors you listed above:

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³ In this full questionnaire, the EU is referred to as one "country".

⁴ In this full questionnaire, the EU is referred to as one "country".

⁵ In this full questionnaire, the EU is referred to as one "country".

Question 6):

Would you be so kind to fill in **key** single-country literature sources on industrial carbon efficiencies?

SINGLE-COUNTRY ⁶ SOURCES					
Author(s) / Organisation	Title	Year	Industry (sub)sectors covered + Country	Availability (Public / Scientific / Closed) ⁷	Internet link
Please add					
Please add					
Please add					
Please add					
Please add					
Please add					
Please add					
Please add					
Please add					

⁶ In this full questionnaire, the EU is referred to as one "country".

⁷ Public literature is available free of cost (for example on internet), Scientific literature is available at limited cost (from library services). Closed literature is only available at cost (for example yearly fees, or by participation). Please feel free to add closed literature as well.



Question 7).

Please give any additional feedback:

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