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Verification Statement of AENOR for ABENGOA on the Inventory of greenhouse gas emissions corresponding to the year 2013

DOSSIER: 1993/0205/HCO/01

Introduction

Abengoa (hereinafter the company) commissioned the Spanish Association for Standardisation and Certification (AENOR) to make a reasonable revision of the inventory of greenhouse gases (GHG) for the year 2013 of its activities included in the GHG report of 2013, which is part of this Declaration.

Inventory of GHG emissions issued by the Organisation: Abengoa, Campus Palmas Altas c/ Energía Solar, 1- Palmas Altas 41014 Seville (Spain).

Representatives of the Organisation: Fernando Martínez Salcedo, Sustainability Secretary, and José Manuel Delgado Rufino, manager of the Corporate Control Department.

Abengoa was responsible for reporting its GHG emissions considered in accordance with the reference standard ISO 14064-1:2006.

Objective

The objective of the verification is to provide the interested parties with an independent and professional opinion on the information and data contained in the above mentioned GHG Report issued by Abengoa.

Scope of the Verification

The scope of the verification is established for the activities carried out by the companies belonging to Abengoa represented in 2013 annual report, "Corporate Social Responsibility", available in Abengoa's website (<http://www.abengoa.com>).

During the verification the information was analysed according to Operational control approach. The company reports all the GHG emissions attributable to the operations under its control.

The scope of the activities of the company is identified in accordance with the guidelines of standard ISO 14064-1:2006 in direct and indirect activities.

Direct, indirect activities and exclusions from the verification.

Scope 1- Direct GHG emissions

Direct emissions occur from sources that are the property of or are controlled by Abengoa. These include:

- Stationary combustion sources
- Mobile combustion sources
- Emissions of CO₂ from the bioethanol production process
- Emissions from the composting process
- Emissions from the decomposition of organic matter in landfills.
- Process emissions from wastewater treatment plants
- Fugitive emissions of natural gas
- Fugitive emissions of HFC from refrigeration systems

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- Fugitive emissions of SF6 from electrical equipment
- Emissions of HFC/PFC from the use of solvents (not aerosols)
- Emissions of HFC/PFC from the use of aerosols
- Emissions of HFC/PFC from the use of foam blowing agents
- CO₂ emissions derived from the use of lubricants
- CO₂ emissions derived from the use of paraffinic waxes.
- Diffuse emissions derived from the use of greenhouse gases

Scope 2 – Indirect GHG emissions

Indirect emissions are those derived from the activity but generated by other entities, including the emissions of the generation of electricity acquired and consumed by the company. These emissions are:

- Emissions associated with generating purchased thermal energy.
- Emissions associated with generating purchased electrical energy.

Scope 3- Other indirect emissions

The rest of the indirect emissions are a consequence of the activities of the company, but occur in sources that are not the property of the company or controlled by it. These other emissions are:

- Business trips.
- Employee commuting to the workplace.
- Indirect emissions from losses during electricity transport and distribution.
- Indirect emissions due to the value chain of the fuels employed for the production of the electricity consumed.
- Goods and services purchased.

Exclusions

Abengoa companies have been able to exclude from their inventories those sources which imply a value less than or equal to 0,5 % of their total emissions.

Greenhouse gases taken into consideration

The greenhouse gases taken into consideration for the inventory are those defined under the Kyoto Protocol which can be divided into the following categories:

- Carbon dioxide.
- Methane.
- Nitrous oxide.
- Perfluorocarbons.
- Hydrofluorocarbons.
- Sulphur hexafluoride.
- Nitrogen trifluoride

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Base year

Abengoa's inventory is the result of consolidating the inventories of its companies and each one of them define their own base year depending on their characteristics and, in this way, the perimeter variations are carried out at a subsidiary company level.

Materiality

For the verification it was agreed to consider as material discrepancies those omissions, distortions or errors that could be quantified and result in a difference of more than 5% with respect to the total of emissions declared.

Criteria

The criteria and information that have been taken into consideration to carry out the verification were the following:

- 1) Standard ISO 14064-1:2006: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.
- 2) Standard ISO 14064-3:2006: Specification with guidance for the validation and verification of greenhouse gas assertions.
- 3) Internal Standard of Abengoa NOC-05/003 "Quality and Environment Management. Sustainability Management. Greenhouse gas emissions inventory"
- 4) Technical Instructions and procedures of Abengoa companies.

Finally, the "Abengoa Greenhouse gas emissions report 2013" was subject to verification.

AENOR waives any responsibility for decisions, regarding investment or of any other type, based on this declaration.

Conclusion

Based on the above, in our opinion *the information on the GHG emissions reported in "Abengoa Greenhouse gas emissions report 2013" is materially correct and is a fair representation of the emissions of its activities.*



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In consequence with this Declaration below is a list of the emissions data that were finally verified. The information is broken down according to two different criteria:

I) by scope according to Standard ISO 14064-1

II) by activity segment

I) Verified data broken down by scope according to Standard ISO 14064-1Scope 1

a) GHG emissions.

Scope 1 emissions-Greenhouse Gases			
Non biomass emissions (t CO ₂ -eq)		Biomass emissions (t CO ₂ -eq)	
Mobile combustion	97.144	Mobile combustion	2.338
Stationary combustion	3.260.710	Stationary combustion	1.404.388
Fugitive emissions	15.391	Fugitive emissions	0
Processes	17.368	Processes	1.592.944
Total	3.390.613	Total	2.999.670

b) Emissions per GHG type.

Scope 1 emissions -CO ₂ *	
Total emissions (t CO ₂ -eq)	
Mobile combustion	98.461
Stationary combustion	4.461.465
Fugitive emissions	9.446
Processes	1.592.944
Total	6.162.316

* Emissions from biomass are included

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Scope 1 emissions - CH₄	
Total emissions (t CO ₂ -eq)	
Mobile combustion	118
Stationary combustion	76.132
Fugitive emissions	2.222
Processes	0
Total	78.472

Scope 1 emissions - N₂O	
Total emissions (t CO ₂ -eq)	
Mobile combustion	903
Stationary combustion	127.501
Processes	17.368
Total	145.772

Scope 1 emissions - HFC	
Total emissions (t CO ₂ -eq)	
Fugitive emissions	2.851
Total	2.851

Scope 1 emissions - SF₆	
Total emissions (t CO ₂ -eq)	
Fugitive emissions	873
Total	873

Note: PFC and NF₃ emission sources have not been identified.

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Scope 2

Total emissions (t CO ₂ -eq)	
Electric energy consumption	485.490
Thermal energy consumption	107.904
Total	593.394

Scope 3

Total emissions (t CO ₂ -eq)	
Acquired supplies	3.919.638
Business trips	27.668
Employee commuting	17.748
Electric energy distribution losses	69.341
Value chain of the fuels used to generate the energy consumed	114.540
Total	4.149.935

II) Verified data broken down by activity segment

The business of Abengoa is organized into three different activities: Industrial production, Concession-type infrastructures and Engineering and construction. Below is a list of the emissions data that were verified broken down by activity segment according to the ISO 14064-1 scopes.

	Industrial production	Concession-type infrastructures	Engineering and construction	Total
Scope 1	1.577.895	1.760.265	52.454	3.390.614
Scope 2	516.576	44.800	32.018	593.394
Scope 3	2494374	264.333	1.391.227	4.149.934
Total	4.588.845	2.069.398	1.475.699	8.133.942

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In addition, the emissions from biomass are:

	Industrial production	Concession-type infrastructures	Engineering and construction	Total
Combustion of biomass	1.405.995	2	729	1.406.726
Other emissions from biomass	1.592.944	0	0	1.592.944
Total	2.998.939	2	729	2.999.670



Lead Verifier: Raul BLANCO BAZACO
Madrid, 3 February 2013



Environment Manager: José MAGRO GONZÁLEZ