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Total

October 2018

Independent assurance report on the award of the "Total Ecosolutions" label to the "BioTech D" product

ERNST & YOUNG et Associés



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Further to your request, we have performed a review in order to obtain reasonable assurance that the "BioTech D" product, a description of which can be found on the web site www.total.com¹ and in the external datasheet dated June 12th, 2018, has obtained the "Total Ecosolutions" label in accordance with the version 5 of the "Total Ecosolutions Guidelines" dated June 22nd, 2016 (hereafter referred to as the "Guidelines"); the Guidelines, which can be downloaded from the web site www.total.com¹, have been established on the basis of the ISO 14020 and ISO 14021 standards and were the subject of a preliminary external review which gave rise to the issue of an independent report on their design, this report also being accessible on www.total.com¹.

We conducted our review in accordance with international standard ISAE 3000 (International Standard on Assurance Engagements) defined by IFAC (International Federation of Accountants). It is the responsibility of Total to regularly update the Guidelines, to ensure that they are made available to internal users and third parties, and to apply the Guidelines. It is our responsibility to express, on the basis of our review, a conclusion on the award of the "Total Ecosolutions" label to the "BioTech D" product.

Nature and scope of our review

To express our conclusion, we performed the following review:

- We have assessed the reliability, accuracy, understandability, neutrality, completeness and relevance of the Guidelines and the constituents of the "Total Ecosolutions" label request file for products and services.
- We have conducted interviews with the persons in charge of preparing the label request file, and analyzed the documentation available (aiming at justifying the methods of evaluation of the product's overall environmental impact and of the comparative performance evaluation with the reference product). We have also reviewed the meeting minutes and documents used during the validation process by the "Total Ecosolutions" Labelling Committee and the Total Ecosolutions Management Committee, in order to identify any risks of deviation in relation to the label award process defined in the Guidelines. However, the scope of our work did not include the verification of data used as sources for the calculation.

¹ Exact address: <http://www.ecosolutions.total.com>

To conduct the aforementioned procedures, we called on members of our teams specialized in environment and sustainable development.

Information or explanations

- The Guidelines aim to define the rules for the award of the "Total Ecosolutions" label, the organization and responsibilities, the methods for assessing the level of environmental performance and verifying the compliance with the Guidelines, the internal and external communication procedures as well as the rules for document management, in accordance with the requirements of the ISO 14020 and ISO 14021 standards.
- The "BioTech D" product is a liquid biomass with combustion properties identical to those of heavy fuel oils (LHV, viscosity, sulfur and nitrogen content). It is made up of a mixture derived from the distillation of Crude Tall Oil (CTO), a residue of the Kraft process which produces paper pulp from softwoods.
- The assessment of environmental and health performance of the "BioTech D" product is performed by comparison, for an equivalent service provided, with a heavy fuel oil ULSD 1%S.
- The environmental assessment of the "BioTech D" product is based on a comparative assessment of CO2 emissions, realised in accordance with the ISCC-EU private standard translating the requirements of the Renewable Energies Directive. The evaluation of the health performance of the "BioTech D" product was performed by a comparison between the hazard classes in the Material Safety Data Sheets (MSDS).
- The functional unit considered is "Produce 1MJ of heat in an industrial boiler equipped with a fumes treatment unit".
- The benefits considered significant and validated by the "Total Ecosolutions" Management Committee of the " BioTech D " product are :
 - A reduction of CO2 emissions by 97% ;
 - A reduction in the health impact.

Conclusion

In our opinion, the "BioTech D" product has been awarded the "Total EcoSolutions" label, in all its significant aspects, in accordance with the Guidelines.

Paris-La Défense, October 19th, 2018

ERNST & YOUNG et Associés
Sustainability Services



Christophe Schmeitzky