Environmental and Social Data Sheet

Overview

Project Name: Project Number:	ARISTON THERMO RDI 2011-0384
Country:	Italy, France, Switzerland, Germany, the Netherlands, Belgium
Project Description:	The project concerns the promoter's investments for the development of new products and technologies primarily in the areas of thermal comfort including (i) heating and water heating systems, (ii) burners for heating applications and industrial services and (iii) components including heating elements and thermostats for heating applications.
EIA required:	NO

Project included in Carbon Footprint Exercise¹: NO

(Details are provided in section: "Carbon Footprint")

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project concerns investments in research and development for thermal comfort (Heating and Water Heating) systems and technologies that will be carried out in existing facilities already authorised and therefore do not require an Environmental Impact Assessment (EIA) under Annex II of the Directive 2011/92/EU.

The project will contribute to significant Energy Efficiency improvements throughout the range of the developed products, while the part of the project that concerns systems based on renewable energies will contribute to Greenhouse Gas emission reductions. The project is therefore considered acceptable.

Environmental and Social Assessment

Environmental Assessment

The project will contribute in addressing requirements set out by three products and buildings related directives and namely (i) Energy Performance of Building Directive (EPBD), (II) Directive for Ecodesign² requirements for Energy Related Products (ErP) and (iii) Directive on the Promotion of the Use in Energy from Renewable Sources (RES).

The big majority of the sub-projects to be financed will lead to the development of products with improved energy efficiency either when they concern upgrades of existing products or when they facilitate the replacement of a technology to its more efficient equivalent. The developments within the <u>renewable</u> area are the most significant: heat pumps could reduce energy consumption between 35% (medium-end) to 45% (high-end) compared with applications using high-efficiency conventional boilers; solar products could reduce energy consumption by up to 70% when compared with electric / gas storage water heater applications, and the new micro Cogeneration system could reduce energy consumption by

¹ Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100 000 tons $CO_2e/year$ absolute (gross) or 20 000 tons $CO_2e/year$ relative (net) – both increases and savings.

² 'Ecodesign' means the integration of environmental aspects into product design with the aim of improving the environmental performance of the product throughout its whole life cycle from raw material use to final disposal;

up to 35% compared with applications using high-efficiency conventional boilers. The reductions in the <u>high-efficiency condensing boilers</u> under development vary between 5% compared to existing condensing equivalent products all the way to 20% when they concern the replacement of conventional boilers, and even higher when combined with solar thermal components; finally in the <u>conventional boilers</u>, the gains are more modest and can be from 8 to 15% when compared to existing high-efficiency conventional boiler but could be significantly higher when the systems replace existing non-high efficiency conventional systems.

EIB Carbon Footprint Exercise

Project is not included - the EIB draft Carbon Footprint Methodologies only include emissions from Investment Loans, and large allocations under Framework Loans, above the methodology thresholds.