Call for Participation

In the framework of the collaboration between the Italian Ministry of Environment, Land and Sea (IMELS) and the Ministry of Industry and Information Technology of the People's Republic of China (MIIT), M&D Strategy has been appointed of selecting targeted Italian companies in the field of energy efficient technologies of glass and ceramic industries, especially companies have long-term technical experience in the development of industrial boilers and furnaces, to attend the "Sino-Italian Forum on Energy Efficiency in the Glass and Ceramic Sectors" in Beijing on November 3rd, 2016.

Sponsored activities will cover:

- Participation to the "Sino-Italian Forum on Energy Efficiency in the Glass and Ceramic Sectors" organized by IMELS and MIIT;
- Presentation of the best practice and technologies of energy saving and emission reduction for ceramic and glass sectors on the forum;
- Discussion with the ceramic and glass processing companies of Zibo, one of the most famous ceramic and glass cluster area in China to explore business opportunities.

Sino-Italian Forum on Energy Efficiency in the Glass and Ceramic Sectors is organized by the Italian Ministry of Environment, Land and Sea (IMELS) and Ministry of Industry and Information Technology of the People's Republic of China (MIIT).

The Forum will focus on the following topics:

- New Tendency of glass and ceramic industries and Challenges of energy saving and environmental protection technologies;
- Energy saving and emission reduction technology for ceramic and glass industries;
- New mechanism of energy conservation service for glass and ceramic sectors.

Detail list of interested technologies is attached.

The initiative is intended to promote the Italian technologies, products and services to accelerate the clean and efficient utilization of coal in Chinese industry, foster the industrial green development, reduce the generation and emission of air pollutants and improve the air quality. Chinese Government has issued the "Action Plan for the Clean and Efficient Utilization of Coal in the Industry".

IMELS and MIIT are planning to construct a Sino-Italian green industrial demonstration zone, which focus on the energy saving and reducing consumption of coal-fired boiler and furnace of the ceramic and glass processing industry of Zibo area, Shangdong Province, eastern China, through the application of Italian advanced technology and experiences. China has over 6,000 glass and ceramic producers, each with annual sales of more than 3 million Euros. The total annual sales amount of these 6,000 enterprises is over 180 billion Euros. But comparing to international standard, the energy efficiency of the kilns and furnaces of those enterprises are low, which is the important source of environmental pollution and greenhouse gas emissions.

Zibo is one of the most famous cluster area of glass and ceramic industry in China, IMELS and MIIT hope the experience of the Sino-Italian cooperation in Zibo could be disseminated to the whole glass and ceramic industry in China.

In particular the initiative aims to:

- 1. Promote the know-how transfer on policies and standards adopted in China and Italy for the development of green industry;
- 2. Promote the exchange of best practices and the sharing of perspectives for energy efficiency enhancement in the glass and ceramic sectors, by involving Chinese and Italian experts and enterprises.
- 3. Identify and possibly select the most suitable Italian technologies and companies to take part in the Sino-Italian Green Industrial Demonstration Zone project.
- 4. To provide the opportunity for Italian enterprises to cooperate with Chinese enterprises directly on concrete projects.

Location: Beijing - People's Republic of China

Practical/Logistic information will be provided upon application

Expression of interest to be sent by e-mail within October 7th, 2016.

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Annex: List of interested technologies from Zibo, Shangdong Province, China

1 Coal-fired Industrial Furnace-Ceramic Industry

Main pathways of technical reformation of energy conservation and environment protection in ceramic industrial concentration area:

1.1 Ceramic clean and efficient milling

Implement high efficient and short process technical transformation, including raw material drying milling, continuous ball milling, and low emission spray drying milling, to realize standardization of building ceramic powder supply, construct centralized powder supply center, and improve levels of energy efficiency management and cleaner production in the zone. In addition, make a basic research on raw material of ceramic centralized milling and discuss operating models.

1.2 Industrial furnace system transformation

Technical transformation of combustion systems of industrial furnaces, furnace body heat preservation systems, flue gas waste heat recovery systems and dedusting desulfurization defluorination environmental protection systems. These systems, products and equipments should be suitable for the industrial furnace, such as tunnel furnace, roller furnace and shuttle furnace, which are in the field of ceramic (construction ceramics and domestic ceramics), refractory and other sectors. At the same time, the emissions of major pollutants should reach the emission standards. (The emission of ceramic furnace dust particles should be below 30 mg/m3, sulfur dioxide below 100 mg/m3 and nitrogen oxide emissions below 20 mg/m3, sulfur dioxide below 200 mg/m3 and nitrogen oxide below 20 mg/m3.)

The following specific technologies are needed:

- (1) The energy-saving technologies of industrial furnace concerning the electromechanical system (product and equipment), such as the transform technology of automatic control system, the variable frequency speed regulation technology for the induced draught fan and the transmission device of blast furnace.
- (2) The energy-saving technologies of industrial furnace concerning the combustion system (product and equipment), such as the adoption of energy-saving burners, the fuel addition and the transform of dehumidification and air-supply system.
- (3) The energy-saving technologies of industrial furnace concerning the thermal insulation system (product and equipment), such as the substitution of refractory materials of furnace lining the transform of the furnace internal/external insulation materials and the adoption of infrared irradiation energy-saving coatings.

(4) The energy-saving technologies of industrial furnace concerning the waste heat recovery system (product and equipment), such as the adoption of waste heat recovery devices and other high efficient and energy-saving heat exchange devices.

1.3 Application of shale, industrial tailings and industrial waste residue

Investigate application of shale, industrial tailings, and industrial waste residue in building ceramic industries, through drawing from the Italian advanced industrial design concept of green environmental protection, highlight the characteristics of shale, industrial tailings and waste residue, turn "waste" into wealth, and develop new green building ceramic products.

1.4 Integrated management system of energy efficiency

Introduce the Italian energy efficiency management system into Chinese ceramic production industries, and improve the level of comprehensive management of energy efficiency building ceramic industry.

2 Coal-fired Industrial Furnace-Glass Industry

Main pathways of technical reformation of energy conservation and environment protection in Glass industrial concentration areas:

2.1 Industrial furnace system transformation

Implement technical transformation of total oxygen combustion, heat preservation of furnaces, furnaces dedusting, desulfurization and denitration, integration of waste heat utilization, etc.

2.2 Communication of energy saving and environmental protection on daily-using glass