

December 28<sup>th</sup>, 2016

Dear members and friends of WTERT,

the MatER Study Center, sister organization of the Global WTERT Council, wishes you a Happy and Successful 2017.

This 2016 was the sixth year of MatER activity, since it started in 2011. The six waste management companies (A2A, Brianza Energia e Ambiente, HERA Ambiente, IREN Ambiente, Linea Group Holding, Hest Ambiente), members of the MatER Coordinating Committee, continued to support our work even during this year guaranteeing the necessary funding to go further with our research activities.

On November 2016, MatER organized a Workshop titled "*New frontiers for energy and material recovery from waste*" at Ecomondo, the technology platform for the Green and Circular Economy in the Euro-Mediterranean area, that is the largest showcase in the Euro-Mediterranean area for advanced and sustainable technology for processing and recycling all kinds of waste; treating and reclaiming water, waste water and polluted marine sites; efficient use and transformation of raw and processed materials and the promotion of renewable raw materials.

On September 2016, two members of the MatER Study Center participated to the Waste-to-Energy IRRC (International Recycling and Recovery) Congress in the Austrian capital. The event has been a good occasion of personal enrichment and debate among experts belonging to the world of industry, politics, science and technology specifically in the Waste to Energy sector.

Prof. Grosso, of the Department of Civil and Environmental Engineering at Politecnico di Milano and member of the scientific committee of MatER Study Center, published the new editorial of the WASTE MANAGEMENT & RESEARCH journal titled "*Sound and advanced municipal waste management: Moving from slogans and politics to practice and technique*".

A further activity concerns our collaboration with Lombardia Region, by evaluations of innovative plants in investigation, environmental assessment of construction and demolition waste management system, training (i.e. unconventional thermal waste treatment technologies, energy balance of incinerators, considering the EU guidelines in the field of BREF revision).

During all this year we constantly monitored and analyzed the most important Italian and international updates on waste management (you can find all of them on our website, in the *News* section). Our MatER researchers published several international **papers** about waste management, emissions and LCA activities: a list of them can be found on the *Publications* section of our website.

Our MatER researchers took part to many national and international **meetings**, with **oral presentations** and related full paper available in the meeting records. Here below a short list of the most significant ones with the name of the speakers. The full list is available on our website, in the *Meetings/ Attended by MatER* section, while here we report some of them:

- SIDISA016 - X International Symposium on Sanitary and Environmental Engineering (Rome, June 2016): Research, education, communication: an integrated approach for food waste prevention (M. Grosso);
- Life Cycle Assessment of a WEEE management system: Focus on resource and toxicity related impact categories (L. Rigamonti);
- Trace pollutants atmospheric emissions from Clinker production facilities utilising secondary waste fuels (S. Cernuschi).
- Venice Symposium 2016 - "*A practical method for the calculation of the R1 index of waste-to-energy facilities*" (F. Viganò).

MatER Study Center aims at being "social", for this reason, we pay a special attention to our website. A contract for the analysis and planning of the Digital Strategy of MatER has been awarded to Quaerys Srl, an innovative start-up operating in the fields of Social Media Monitoring & Analysis and Big Data Content Analysis. The purpose is defining the communication strategy through MatER channels, also through the redesign of the MatER website, which will be On-Line at the beginning of the new year.

In 2016 our research activity addressed issues raised by either private companies and public authorities. Here is a list of the **most important research projects**; final reports are available or will be accessible on our website once the studies will be completed.

- *Modelization of WtE plants and assessment of their performance;*
- *Environmental evaluation of Construction & Demolition Waste management;*
- *Recovery of Bottom Ash from Waste Incineration;*
- *Materials from the recycling of packaging waste: quality and market;*
- *High-Temperature measurements in WtE plants;*
- *Measurement of Ultrafine and Nanoparticles Emissions;*

- *Technical and economic assessment of novel technologies for the thermal treatment of waste.*

During the year MatER has set up the organization and the program of the 3<sup>rd</sup> MatER Meeting on "*Trends and innovation in waste management*", to be held on May 22-23, 2017 at the Piacenza Campus of Politecnico di Milano. The meeting is structured in 4 sessions: 1) strategies and perceptions on waste management; 2) closing the loop: potential and critical issues; 3) processes and technologies for energy recovery; 4) processes and technologies for material recovery. The second day (May 23<sup>rd</sup>) will also include a focus (coordinated by Prof. Antonio Massarutto) on regulatory issues of waste management, with a round table participated by the Italian regulatory authority and regulators from other countries, Antitrust, OECD, European Commission. A visit to an important waste treatment facility is being also organized for the day after the end of the meeting (May 24<sup>th</sup>). We look forward to your participation.

Best Wishes of a Joyful and Fruitful New Year to all WERT sister organizations!

Our Best Regards.

*Prof. Stefano Consonni*

*Chair of the MatER Study Center*



Some members of the MatER Study Center @ECOMONDO 2016, Rimini (Italy)