

Policies and Strategies

Impact of EU Legislative Developments on the Waste-to-Energy Sector

Patrick Clerens and Natalia Walczak 3

Brexit – Effects on European Waste Management

Kirsten Berry 15

Waste Management Projects in Emerging Markets: Risks and their Minimization

Tobias Faber and Maria Koliasta 27

Think Global – Act Local:

A Common Approach for International Projects and Local Markets

Andres Kronenberg 41

How Oxfordshire County (UK) Managed to Close Its Landfill with a Successful Association of *Material-from-Waste* and *Energy-from-Waste* Solutions

Christophe Cord'homme 53

Waste Management 4.0 at the North/South/West/East Viewpoint

Dagmar Juchelková, Klaus Koppe and Helena Raclavská 75

Waste Management: A Playground for Utopians and Charlatans

Luciano Pelloni 81

Country Reports

What are the Preconditions and Drivers for the Development of Waste Management in a Country?

Ella Stengler and Maxime Pernal 93

Progress on Implementing an Advanced Waste Management System in the Czech Republic

Jaromír Manhart 111

Problematic Development of Implementation of WTE Projects in Slovakia

Juraj Musil, Emília Hroncová and Juraj Ladomerský 121

Waste Management Situation and Perspectives in Bosnia and Herzegovina

Mehmed Cero, Irem Silajdžić and Sanda Midžić Kurtagić..... 135

Waste-to-Energy Implementation and other Investment Opportunities in the Greek Waste Management Sector

Antonios Sakalis and Efstratios N. Kalogirou 145

Waste Incineration

Revamping Projects in the Waste-to-Energy Boilers in Brussels, Paris and Rome

Agostino Calcagno, Joao Parente and Luigi Bagnoli 161

Optimization of Plant Operation by Means of Technical Service

Michael Mück 177

Approach to Optimize Energy Efficiency

Frédéric Aguesse, Maud Tacci and Damien Lebonnois 201

Online Determination of Elementary and Fractional Waste Composition for Municipal Solid Waste Incineration Plants (MSWIP)

Tobias Widder, Michael Beckmann and Philip Reynolds..... 213

Capturing of CO₂ in Waste Incineration Plants towards Power2Fuel

Torsten Buddenberg and Christian Bergins 229

Thermo-Recycling

Ulrich Martin and Axel Hanenkamp..... 245

Early Fire Detection and Automatic Extinguishing in Waste-to-Energy Power Plants and Waste Treatment Plants

Albert Orglmeister 261

Mechanical Biological Treatment and Solid Recovered Fuels

Planning, Construction and Operation of Mechanical-Biological Waste Treatment Plants – Experience Gained in International Projects –

Burkart Schulte 277

Single Stage Processing of Waste for Cost Efficient RDF Production

Josef Adam, Alexander Curtis, Roland Pomberger, Renato Sarc,
Michael Lackner and Stefan Scheiflinger-Ehrenwerth 287

High Calorific Fraction for Energy Recovery in Poland – an Overview of the Current Situation

Emilia den Boer 301

Energy Recovery from High Calorific Fractions by Incineration Together with Sewage Sludge in the Fluidized Bed Furnace in Simmeringer Haide

Friedrich Kirnbauer and Stephan Kraft 315

Camera Based Optimization of Multi-Fuel Burners for the Use of Substitute Fuels in the Cement Industry

André Dittrich, Sina Keller, Markus Vogelbacher, Jörg Matthes,
Patrick Waibel and Hubert B. Keller 329

Pyrolysis and Gasification

Achieving a Closed Carbon & Circular Economy for the Waste Management Sector – Net Zero Emissions, Resource Efficiency and Conservation by Coupling the Energy, Chemical and Recycling Sectors –

Roh Pin Lee, Alexander Laugwitz, Florian Keller, Christian Wolfersdorf,
Friedemann Mehlhose and Bernd Meyer 343

Role of Pyrolysis in Distributed Town-Scale Energy Systems and Research Results from a Pre-commercial Facility Processing Waste-derived Feedstocks

Nelia Jurado Pontes, Mark Harradine, Shaun Gomm,
E.J. Anthony and Stuart T. Wagland 355

Status of Planning and Construction of Gasification Plants in the United Kingdom
Timothy Kast, Jim Starkey, Matthew Pierson and Michael L. Murphy 367

Operating Experience from Japanese Waste Gasification Plants with Direct Melting System
Nobuhiro Tanigaki, Tomo Kashiwabara and Toshimi Nagata 379

Flue Gas Treatment

SNCR Technology to Meet Challenging NO_x Reduction Requirements
Wolfgang Schüttenhelm and Philip Reynolds 391

Low-Temperature SCR
– Intelligent and Cost-Effective Regeneration without Excess Emissions –
Mario Marcazzan 407

Flue Gas Cleaning in Waste-to-Energy
– Best Available Technology –
Christian Fuchs 417

Dry, Semi-dry or Wet – Which System Fits Best Depending on the Overall Conditions? –
Rüdiger Margraf 431

Ready-to-use Sodium Bicarbonate in Flue Gas Treatment
– Experience Feedback –
Jean-Pascal Balland 449

Mercury Removal by Chemisorption
Wolfgang Esser-Schmittmann and Sandra Scheele 463

Innovative Technical Solutions for Reduction
of Waste Fuel Specific Emissions in Cement Plants
Renato Sarc, Roland Pomberger and Karl E. Lorber 475

Materials and Corrosion

Get to Know the Corrosion Mechanisms in Waste-to-Energy Plants

Gabriele Magel 501

Ceramic Coating in a High-Pressure WtE Steam Generator

– Operational Experience in Zabalgardi Plant in Bilbao –

Ildefonso Goikoetxea and Eddie Marcarian 515

15 Years of Operating Experience with Thick Nickel Plating

Electrolytic Nickel Coated Tubes in Waste Incineration Plants

– Protection against Corrosion –

Jörg Eckardt 529

Author Index 539

Advertiser Index 560

Subject Index 565