

BioCycle 28TH ANNUAL WEST COAST CONFERENCE
REFOR14WEST
RENEWABLE ENERGY FROM ORGANICS RECYCLING

Processing Mixed MSW For Recovery Of The Organic Fraction San Diego, CA

Ljupka Arsova
Consultant II
Gershman, Brickner & Bratton, Inc.

April 9, 2014

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1

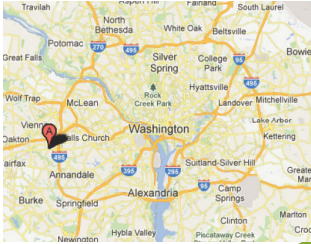

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GBB Overview

Established in 1980

Solid Waste and
Technology
Consultants

Helping Clients Turn
Problems into
Opportunities



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GBB's Waste Consulting Services

- Economic, technical and environmental reviews
- Procurements
- Due diligence third-party reviews
- Waste characterization and sourcing
- Process planning and conceptual designs
- Independent feasibility consultant



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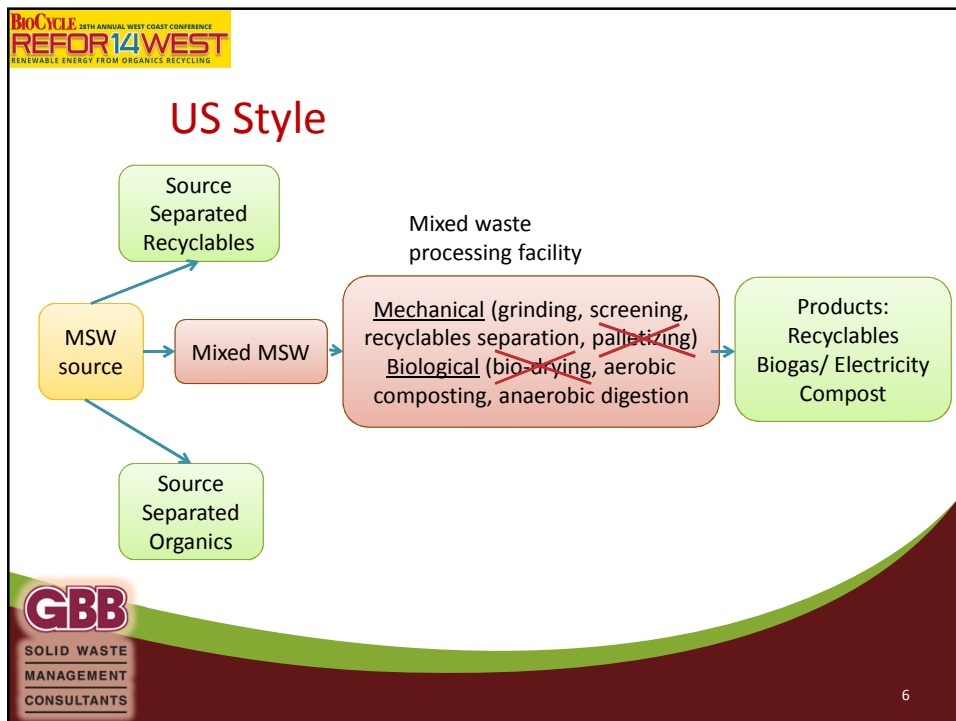
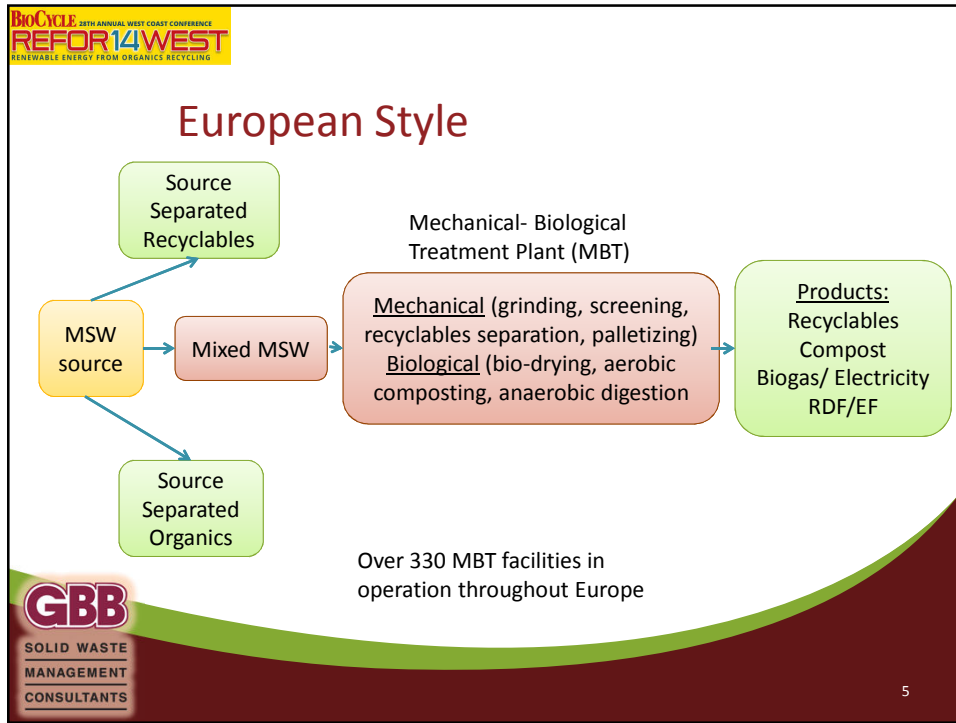
3

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MIXED MSW PROCESSING PLANTS

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Veolia MRF & MBT facility Southwark UK



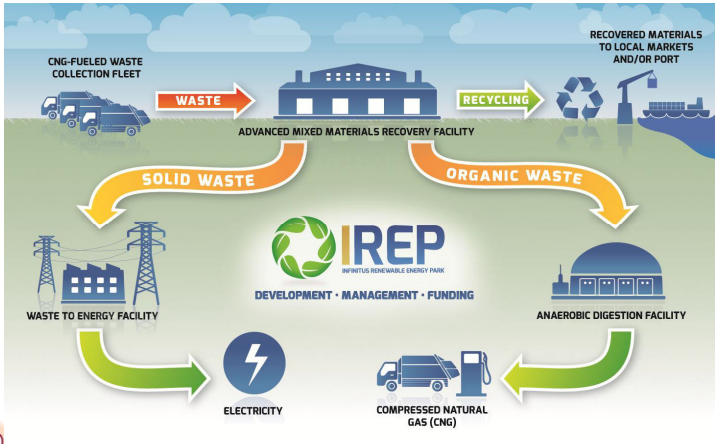
Germany's largest MBT facility
225,000 TPY in Hanover
(operated by AHA Hanover)

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City of Montgomery, Alabama



The diagram illustrates the waste management cycle for the City of Montgomery, Alabama. It starts with a **CNG-FUELED WASTE COLLECTION FLEET** collecting **WASTE** from the city. This waste is sent to an **ADVANCED MIXED MATERIALS RECOVERY FACILITY**. From there, **RECYCLING** occurs, with **RECOVERED MATERIALS TO LOCAL MARKETS AND/OR PORT**. **ORGANIC WASTE** is sent to an **ANAEROBIC DIGESTION FACILITY**, which produces **COMPRESSED NATURAL GAS (CNG)**. **SOLID WASTE** is sent to a **WASTE TO ENERGY FACILITY**, which produces **ELECTRICITY**. The central **IREP** (INFINITE RENEWABLE ENERGY PROGRAM) is responsible for **DEVELOPMENT • MANAGEMENT • FUNDING** of these processes.

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Important facts

- Gate fees- \$120/ton (UK, WRAP 2011)
- Products
 - Recyclables (mostly ferrous and non-ferrous)
 - Compost like product
 - Refuse derived fuel (up to 40% of the incoming waste)

Country	Recycled & Composted (%)	Energy from Waste (%)	Landfilled (%)
Germany	62	37	1
Netherland	60	38	1
Belgium	56	42	1
Sweden	48	51	1
Austria	62	35	3

Source: EUROSTAT, 2011 status

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9

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Questions and comments?

Thank you!

Ljupka Arsova
 Consultant II
 1-800-573-5801
ljarsova@gbbinc.com
www.gbbinc.com

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10