CEWEP

Confederation of European Waste-to-Energy Plants

Heating and Lighting the Way to a Sustainable Future

Waste-to-Energy Plants produce energy through the thermal treatment of waste. They are an essential part of both the waste management and energy supply network.

CEWEP e.V. – the Confederation of European Waste-to-Energy Plants

CEWEP represents about 380 Waste-to-Energy Plants from 17 European countries and one from the USA. This covers 88% of the Waste-to-Energy Plants in Europe.

Waste-to-Energy Plants thermally treat household and similar waste that remains after waste prevention, reuse and recycling by generating energy from it.

They provide necessary public infrastructure for:

- Careful handling of waste
- Conserving natural resources
- Minimising possible emissions.

The plants represented by CEWEP are operated both by municipalities and private companies. Members are mostly national associations, but also individual plants.

Membership of CEWEP underlines a Waste-to-Energy Plant's commitment to ensuring high environmental standards, achieving low emissions by operating Best Available Techniques and maintaining state of the art energy production from otherwise un-reusable/recyclable materials.

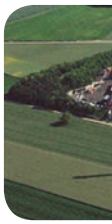
Recycling and Waste-to-Energy are complementary waste treatment methods. Together they are instrumental to fulfil the targets of the European Landfill Directive, to divert biodegradable waste from landfills.

CEWEP members annually treat about 54 million tonnes of household and similar waste that remains after waste prevention, reuse and recycling, in an environmentally sound way.

Members	Treated waste in 2007, in tonnes
Austria, Fernwärme Wien, ENAGES, KRV	1,030,603
Belgium, Indaver, Ipalle	1,036,705
Czech Republic, Pražské služby, SAKO Brno, Termizo, Sdružení STEO	420,580
Denmark, RenoSam (2006)	1,006,161
Finland, Ekokem	*
France, SVDU, Séché Environnement	11,081,692
Germany, ITAD	17,800,000
Hungary, FKF Budapest	389,457
Ireland, CEWEP Ireland	**
Italy, Federambiente	2,989,713
Netherlands, Vereniging Afvalbedrijven	5,543,469
Norway, Avfall Norge	922,000
Portugal, AVALER	1,019,484
Spain, AEVERSU	1,792,737
Sweden, Avfall Sverige	4,470,690
Switzerland, VBSA	3,580,000
UK, Waste Recycling Group	150,000
USA, Energy Answers International	1,076,233
Total	**54,309,524**

* Ekokem's 150,000 tonnes/year plant came into operation at the beginning of 2008
** CEWEP Ireland currently has 3 plants in the planning stages (850,000 tonnes/year)

Waste-to-Energy Plants use waste as an alternative resource to produce sustainable energy.



Sustainable Energy from Waste

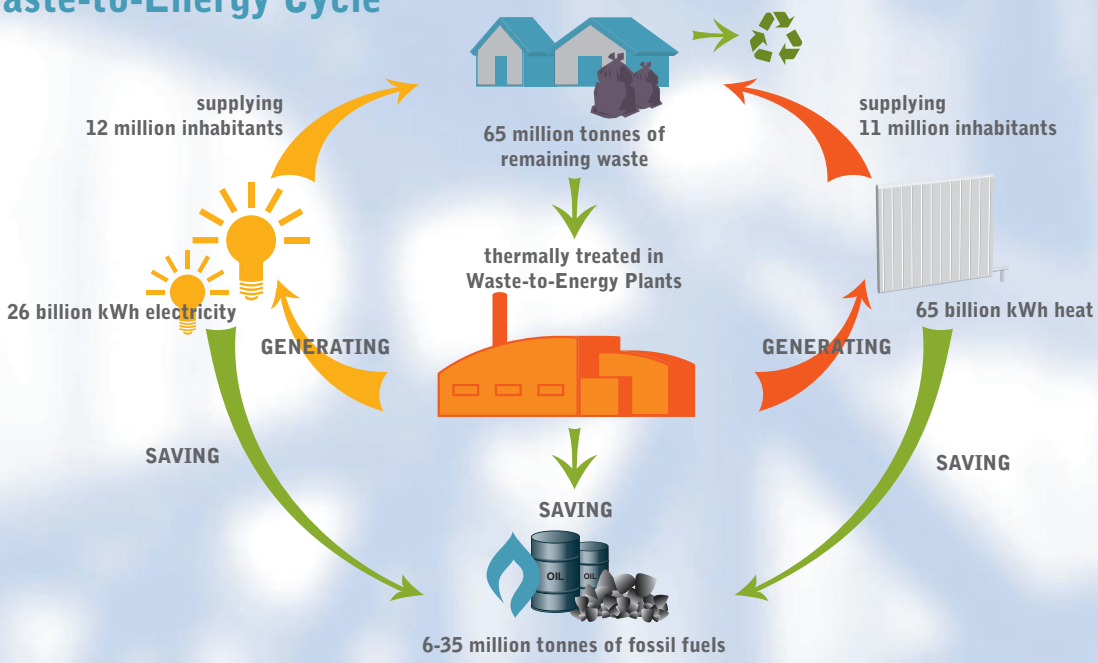
Waste-to-Energy Plants produce heat and electricity from waste, delivering it to households and industry, thus replacing the energy produced by conventional power plants, using fossil fuels.

This is how they help to reduce CO_2 emissions and reaching the aims of the Kyoto-protocol. There is a close link between the sustainable management of natural resources and energy recovery.

To optimize the Waste-to-Energy process CEWEP members not only invest heavily in sophisticated filtering devices to minimise the emissions into the atmosphere, but also in increasing the energy efficiency of the plant so that it can generate as much sustainable energy from the waste as possible.

CEWEP provides practical solutions to the EU and Member States on waste management policy and climate protection goals.

Waste-to-Energy Cycle



On the basis that about 65 million tonnes of household and similar waste that remains after waste prevention, reuse and recycling, was treated in Waste-to-Energy Plants across Europe in 2007 (see map on last page), 26 billion kWh of electricity and 65 billion kWh of heat can be generated.

Then between 6-35 million tonnes of fossil fuels (gas, oil, hard coal and lignite) can be substituted annually, emitting 17-35 million tonnes of CO_2.

Replacing these fossil fuels, Waste-to-Energy Plants can supply annually about 12 million inhabitants with electricity and 11 million inhabitants with heat.

This is equivalent to the entire population of Denmark, Ireland and Latvia that can be supplied with electricity and the entire population of Finland, Luxembourg and Slovakia that can be supplied with heat from Waste-to-Energy Plants throughout the year.

In order to achieve sustainable waste management across Europe to high environmental standards with primary energy savings

CEWEP aims

Boost alternative energy from waste

A major part of household and similar waste that remains after waste prevention, reuse and recycling, is biodegradable. This waste is considered as biomass and therefore a source of sustainable energy.

This alternative energy source should be promoted for its:

- *contribution to climate protection* by reducing fossil fuel consumption and landfill methane emissions, and
- *security of energy supply* for Europe, as Waste-to-Energy is a stable and reliable energy source.

Reducing dependence on landfills

CEWEP aims to highlight that recycling and energy recovery are complementary options in order to divert waste from landfilling.

To avoid wasting natural resources and reducing landfill methane emissions combustible waste should not be landfilled, but treated, in a more sustainable way, in Waste-to-Energy Plants that produce energy from the waste.

Level playing field

The main challenge facing EU waste policy is to move towards a level playing field for waste treatment across the Community. This means applying the same environmental requirements for all plants. Industrial plants that co-incinerate waste, should also meet the same requirements on emissions as Waste-to-Energy Plants.

To prevent ‘eco-dumping’ and ’sham recovery’, quality standards for recovery should be determined. Once this is the case, the incentives for inappropriate waste shipments should decrease.

Promote Public Participation

CEWEP provides information to the public on emission levels, energy efficiency, on the technology of Waste-to-Energy and Waste-to-Energy Plants’ contribution to climate protection in order to raise citizens’ awareness of the role Waste-to-Energy plays in sustainable waste management.

Representation at the European level

CEWEP represents European Waste-to-Energy Plants at the EU level, through thorough analysis of legislation on the environment, on sustainable development and by providing information on the Waste-to-Energy sector to the Commission, Council and European Parliament.

Through this work CEWEP intends to participate in the decision making process from the earliest stage, closely in contact with the decision makers within the European Institutions.

Promote exchange of experience, research and development

CEWEP serves as a platform for the exchange of experience between members, advances scientific, technical and practical aspects of Waste-to-Energy and promotes research, development and dissemination of knowledge towards sustainable waste management and energy recovery.

Members

Austria

Fernwärme Wien Gesellschaft m.b.H.
www.fernwaermewien.at

ENAGES
Energie- und AbfallverwertungsGes. m.b.H.
http://www.e-steiermark.com/enages

KRV Arnoldstein
Kärntner Restmüllverwertungs GmbH
www.krv.co.at

Belgium

Indaver NV
www.indaver.com

IPALLE
www.ipalle.be

Czech Republic

Pražské služby, a.s.
www.psas.cz

SAKO Brno, a.s.
www.sako.cz

Termizo, a.s.
www.termizo.cz

Sdružení STEO
www.steo.cz

Denmark

RenoSam
www.renosam.dk

Finland

Ekokem Oy Ab
www.ekokem.fi

France

SVDU
www.incineration.org

Séché Environnement
www.groupe-seche.com

Germany

ITAD
Interessengemeinschaft der thermischen Abfallbehandlungs-anlagen in Deutschland e.V.
www.itad.de

Hungary

FKF RT
Fővárosi Közterület-fenntartó Rt.
www.fkf.hu

Ireland

CEWEP Ireland
www.cewepireland.com

Italy

Federambiente
www.federambiente.it

The Netherlands

Vereniging Afvalbedrijven
www.verenigingafvalbedrijven.nl

Norway

Avfall Norge
www.avfallnorge.no

Portugal

AVALER
www.avaler.pt

Spain

AEVERSU
www.aeversu.com

Sweden

Avfall Sverige
www.avfallsverige.se

Switzerland

VBSA
Verband der Betriebsleiter und Betreiber Schweizerischer Abfallbehandlungsanlagen
www.vbsa.ch

UK

Waste Recycling Group Ltd.
www.wrg.co.uk

USA

Energy Answers International
www.energyanswers.com

Academic Partners:
WTERT Council,
Columbia University
www.columbia.edu/cu/wtert

Waste-to-Energy in Europe

- **Waste-to-Energy Plants in Europe operating in 2007 (not including hazardous waste incineration plants)**
- **Thermally treated household and similar waste**

Data supplied by CEWEP members unless specified otherwise
** From Eurostat to give an estimate only, as co-incineration plants are included.*
** Data for 2006 used as data for 2007 are not yet available.*

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