

AFRY is recognised as one of the leading technical consultants for Waste to Energy projects.

Waste to Energy Consulting



AFRY
AF PÖYRY

World leading Expertise in Waste to Energy

In-depth knowledge across a wide spectrum of competencies together with long experience enable us to provide our clients support in the entire life cycle of any energy investment – from the pre-investment phase to the completion of the plant. We can do even the most complicated Waste-to-Energy projects all over the world. AFRY has had a substantial role in the design and construction of 135 WtE plants worldwide, with total capacity of more than 20 million t/a. We have been involved in more than 400 waste-to-energy projects over the last 50 years.

EXTENSIVE TECHNICAL EXPERIENCE IN

- Co-incineration of different kind of waste and biofuels
- Waste incineration with different boiler technologies
- Different flue gas treatment systems
- Handling of flue gas residues
- Different power plant concepts
- Plant lay-out design
- Balance of plant
- Life cycle costs
- Steam turbine / generator sets
- Automation and electrical systems
- Refurbishment of existing facilities
- Circular Economy
- Hazardous waste
- Biogas, anaerobic digestion

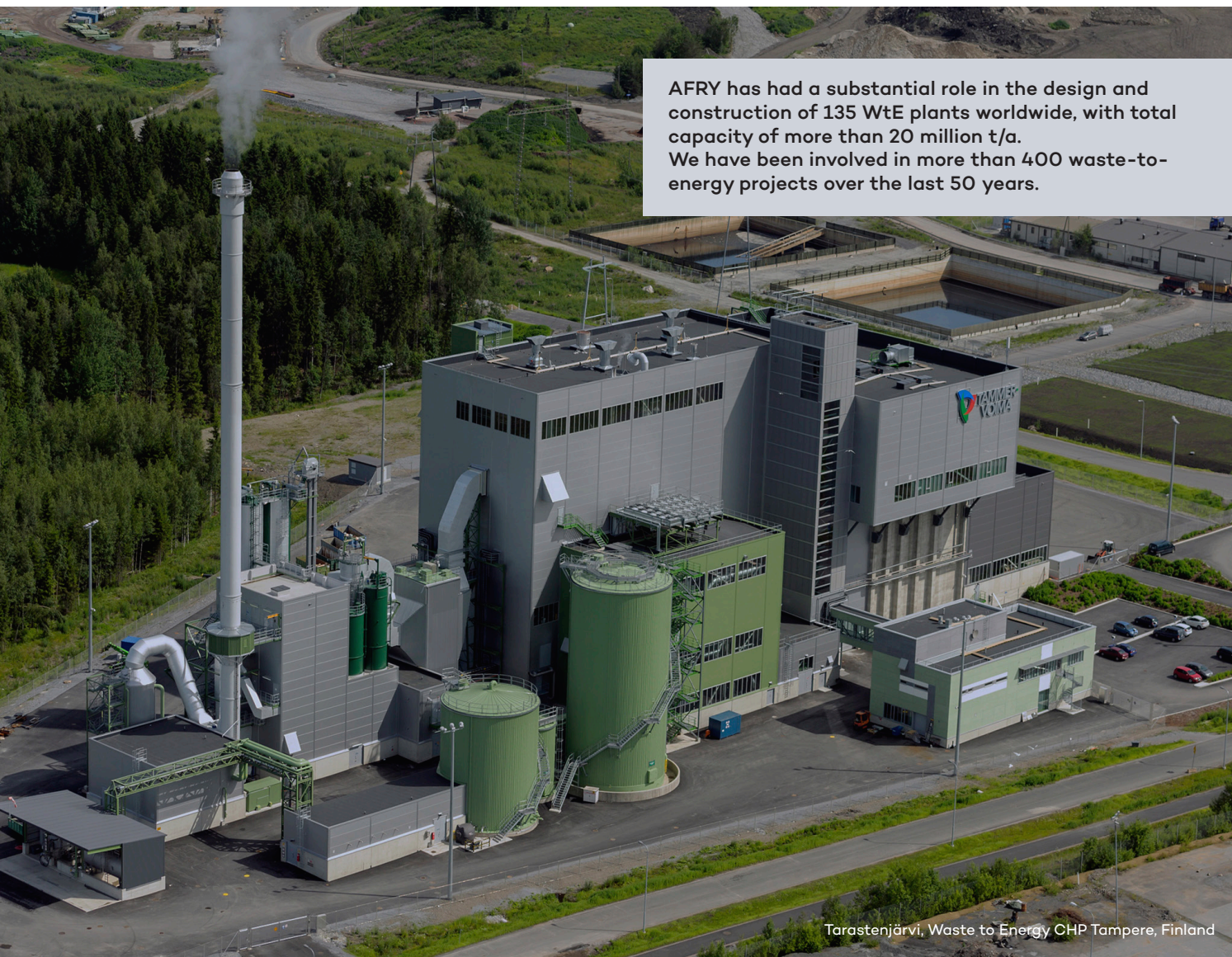
WE OFFER THE FOLLOWING SERVICES IN THE FIELD OF WtE

- Pre-feasibility and feasibility studies
- EIA procedure / Environmental licensing
- Tender enquiry documentation; tender evaluation and preparing of contracts
- Pre-engineering
- Engineering, Procurement and Construction Management services including:
 - Detail engineering, delivery supervision, suppliers workshop QA/QC
 - Project, site and commissioning management
 - Supervision of guarantee and performance test procedures, training

- Owner's engineer services
- Trouble shooting
- Risk management
- Optimisation of combustion and plant
- Measurement and testing services
- Operation and maintenance advisory services
- Institutional and regulatory development in the energy sector
- Studies of alternative fuel policies and of fuel supply and handling
- Advice regarding project financing and associated lenders technical advisory services
- Technical due diligence services for sellers, buyers and lenders of power plants
- Technology assessments (including gasification etc.)
- Contractor's Engineer (CE) services
- Expert witness services

RECENT CLIENTS

- Vantaan Energia, Finland
- UAB Vilniaus Kogeneracinė Jėgainė, Lithuania
- Northbeck Energy Ltd, U.K.
- Thang Long Energy and Environment, Vietnam
- Riikinvoima, Finland
- Tammervoima, Finland
- Kotkan Energia, Finland
- Oulun Energia, Finland
- Fortum Heat, Finland, Sweden, Norway
Lithuania, United Kingdom and Indonesia
- EON Värme, Sweden
- Eesti Energia, Estonia
- Westenergy, Finland
- Lounavoima, Finland
- Eneco, The Netherlands
- Kenertec, Korea



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Tarastenjärvi, Waste to Energy CHP Tampere, Finland

Why are we different?

Market understanding

Experience in more than 80 countries gives us deep insight into different international Waste to Energy challenges.

Whole Life Cycle Experience with Utility Background

AFRY has strong roots in utility companies (e.g. the engineering arms of Fortum in Finland and ATEL/Alpiquin Switzerland) thus possessing full understanding of whole life cycle of power plants, including operation and maintenance.

AFRY is one of very few engineering consultants with a proven track record of delivering full Engineering Procurement and Construction Management (EPCM) services on complex projects. Our EPCM approach can unlock significant additional value for our Clients. We continue to receive valuable feedback from our ongoing Owner's Engineer and EPCM projects.

Best Tools

AFRY utilizes both in-house and commercially available software to assist the development and implementation of its clients' projects. Examples of our in-house software unique to AFRY include:

- **Safety Stepwise** process for management of health & safety related matters through the project phases
- **Co-Pilot** for project risk management
- **Smart Site** from project engineering to construction and commercial operation

Tools are only as good as the user behind them. We have standard methods for study creation and systems for employee knowledge sharing.

AFRY is an international engineering, design and advisory company. We support our clients to progress in sustainability and digitalisation.

We are 17,000 devoted experts within the fields of infrastructure, industry and energy, operating across the world to create sustainable solutions for future generations.

Making Future

CONTACT

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