# YOUR OWN ELECTRICITY FROM WOOD





Juha first powered his summer house using a wind turbine, solar panels, diesel generator and had a wood chip boiler for heat. He wanted to find a solution to use wood for power production and built a wood gas can "El Kamina" to get familiar with the process. This became to process the Volter power plant is still based on.





## Why couldn't CHP plant look good?

What impression does product design give about the company?

Does the design affect how well you take care of the product?

Is your team proud of the product?





## Industrial Design





## Industrial Design

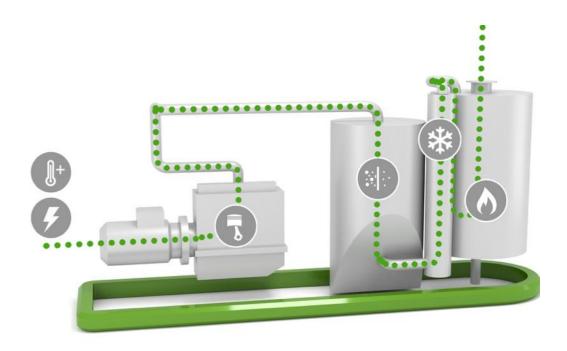
- -Industrial design is not just for "looks"
- -Good design also serves manufacturing, functionality and operations
- -Helps finding passionate partners and employees
- -Has opened sales in 10 countries for Volter

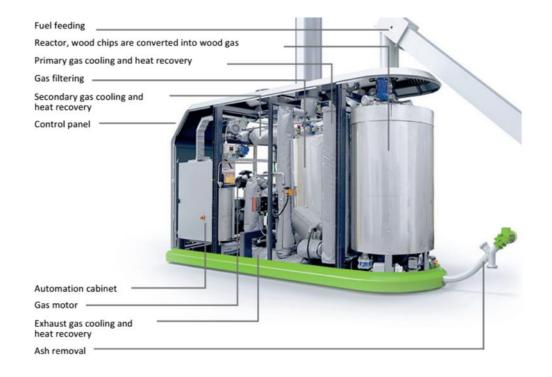


## Our technology

"I have done gasification research and development at VTT since 1981, Volter's gasifier is the first ideal working downdraft gasifier that I have come across. Congratulations!"

Esa Kurkela, Development manager at VTT, Gasification and Gas Cleaning Technologies







## Volter 40 Indoor





## Volter Outdoor





#### Case

Biomass Partners, Rotherwas Industrial Estate, Hereford, UK

#### **Customer challenge**

Reliability of the energy production in an energy park

#### **Our solution**

Volt Factory with 10 Volter 40 CHPs

#### **Customer benefits**

Stable energy production and successful electricity sales and woodchip businesses





#### Case

Cairnhill Farm, Girvan, Scotland, UK

#### **Customer challenge**

High energy costs and expensive boost in grid infrastructure

#### **Our solution**

Two Volter 40 Indoor CHPs

#### **Customer benefits**

Significant monthly energy cost savings of over 11'000 GBP, return on investment in less than three years, carbon footprint reduced by 89%





#### Case

John Ruck Construction and Elms Green Woodchip, Leominster, Herefordshire, UK

#### **Customer challenge**

High energy consumption of the two manufacturing companies

#### **Our solution**

Three Volter 40 CHPs

#### **Customer benefits**

Covering own energy needs and getting income by selling excess to the grid





#### Case

New Trust, Katagami, Japan

#### **Customer challenge**

Developing the greenhouse business profitable with the current wage cost structure

#### **Our solution**

Volter 40 CHP

#### **Customer benefits**

Stabilizing economy by reducing energy costs and selling electricity to the grid





#### Case

Alpua Village Association, Alpua, Finland

#### **Customer challenge**

High energy consumption of an old school building

#### **Our solution**

Volter 40 CHP

#### **Customer benefits**

Empowering local community



# Thank you!

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