

Optimised steam processes: lower costs, less CO_2

Sustainability is more important than ever. Energify optimises your steam processes and reduces your external energy requirements.

Our patented technology reduces energy costs by converting pressure differences in steam networks from 0.5 bar into electricity. Unused pressure and heat energy is connected to a generator in a unit (steam rotation expander), which produces electricity and expands the steam. After expansion, the steam has the required pressure for downstream consumers and heat exchangers.

Energify's proven core technology significantly reduces your external energy requirements. The amortisation period is usually less than three years.



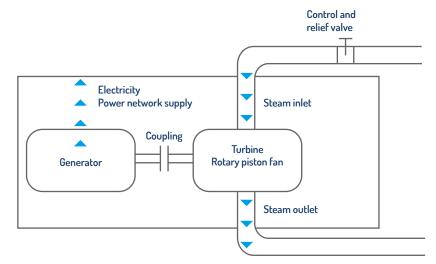
Next Level Technology: easy to retrofit

Energify can be integrated into all steam networks, is compatible with various types of steam generation and reduces external electricity purchases without interrupting the production process.

Good to know: the electricity production costs of the Energify system are significantly lower than for solar or wind systems. Depending on the local situation in the steam network, investment subsidies are possible and in some cases, there is the option of a partial refund of the gas tax.

Product description

- Output from 10 kW to 1,000 kW
- Inlet pressure up to 15 barg
- Pressure differences from 500 mbarg can be utilised
- Steam quantity up to 20 tonnes per module
- Can be used with saturated steam, wet steam and superheated steam



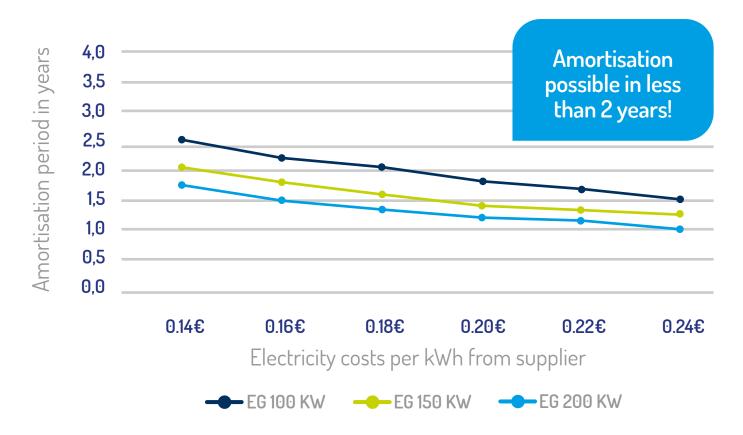
Technical data (practical examples)

	Pressure reducing station	Pressure relief before condensers
Inlet pressure	4 barg	1.5 barg
Outlet pressure	2 barg	-0.5 barg
Steam mass flow	17,000 kg/h saturated steam	5,000 kg/h saturated steam
Electrical output	246 kW	132 kW
Generated electrical power	1.600 MWh/a	858.000 kWh/a
CO ₂ savings	approx. 695 t/a	approx. 380 t/a

Efficiency that convinces!

Due to the considerable savings effects, short amortisation periods can be achieved - even without state subsidies.

Amortisation of various system types*



^{*}Scenario calculations based on various system types, calculated without CHP surcharge, energy tax rebate and levies on own electricity. A CHP surcharge or an energy tax rebate can significantly improve economic efficiency even further.

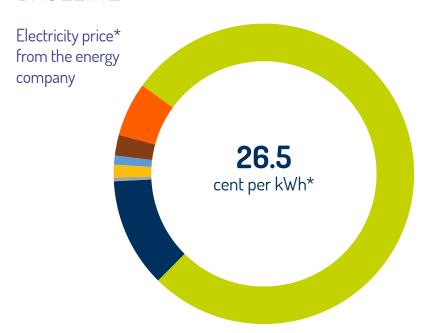
Benefit from funding programmes

We support you in analysing which funding programmes are suitable for improving your energy efficiency.

Example: module 4 for energy and resource-related optimisation of systems and processes from the Federal Office of Economics and Export Control (BAFA).

Use steam effectively, save costs!

BASELINE



Power generation; distribution	20.52 ct
Network charge	3.12 ct
Licence fee	0.11 ct
KWKG surcharge	0.36 ct
§ 19 StromNEV surcharge	0.26 ct
Offshore-network surcharge	0.59 ct
Electricity tax	1.54 ct

Conversion of pressure differences

RESULT

Major cost advantage through in-house power supply





Power generation; distribution	6.0 ct
Network charge	n/a
Licence fee	n/a
KWKG surcharge	n/a
§ 19 StromNEV surcharge	n/a
Offshore-network surcharge	n/a
Electricity tax	n/a

Contact us! We will be pleased to advise you.



CFT - BREATHE THE DIFFERENCE

Since 1999, CFT GmbH Compact Filter Technic has been supporting its customers in mining and tunnelling with comprehensive know-how in the field of dust extraction and ventilation technology as well as air heating and cooling. Since 2022, we have been ensuring our 'Made in Germany' quality standards for you from our new headquarters in Marl (NRW) on more than 7,500 m² of production space - including an innovative fan test stand.

CFT GmbH is part of the internationally operating CFH Group. The holding company bundles several subsidiaries and associated companies under its umbrella, which have one thing in common: excellent engineering services that enable innovative solutions in the field of air at the workplace as well as in the field of energy and the environment, intersectoral in surface and underground operations and around the world.















Dedusting

Ventilation

Air Cooling Systems

Air Heating Systems

Ventilation

Energify

You can find more information at www.cft-gmbh.de or simply give us a call. We will be pleased to answer your questions and introduce Energify to you in a personal meeting.

We look forward to hearing from you!





CFT GmbH Compact Filter Technic Neckarstraße 23 • 45768 Marl Germany



mail@cft-gmbh.de

www.cft-gmbh.de

