

# Atlas Copco Energy Efficient Solutions



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*Sustainable Productivity*

Atlas Copco

## Facts in brief

<b>Established</b>	<b>1873</b> in Stockholm, Sweden
<b>Global presence</b>	Customers in more than <b>170 countries</b>
<b>Employees</b>	<b>37 500</b> in 86 countries
<b>Annual Revenues</b>	BSEK 81 ( <b>BEUR 9</b> )
<b>Operating margin</b>	21.6%



# An industry benchmark

**BEST IN CLASS**  
environmental and  
social performance  
STOREBRAND SRI



 **Dow Jones  
Sustainability Indexes**  
Member 2011/12

Member 2011/2012  
**STOXX**  
ESG LEADERS INDICES



THOMSON REUTERS  
**TOP100**  
GLOBAL INNOVATORS

**ETHIBEL**  
EXCELLENCE label  
  
The standard in  
sustainable investment

  
WE SUPPORT

**ECPI**  Sense in  
sustainability

 **GLOBAL100**

  
**FTSE4Good**

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# Atlas Copco Global Market Presence



# Atlas Copco Focused Business Areas

## Industrial Tools



## Compressors

## Construction Equipment



## Aftermarket and Rental

## Mining and Rock Excavation

# Atlas Copco in Russia

Established **1913** first representative office in Russia

**1996** ZAO Atlas Copco registered

Presence Over **30** branches from North-West to Far East

Employees Around **700**

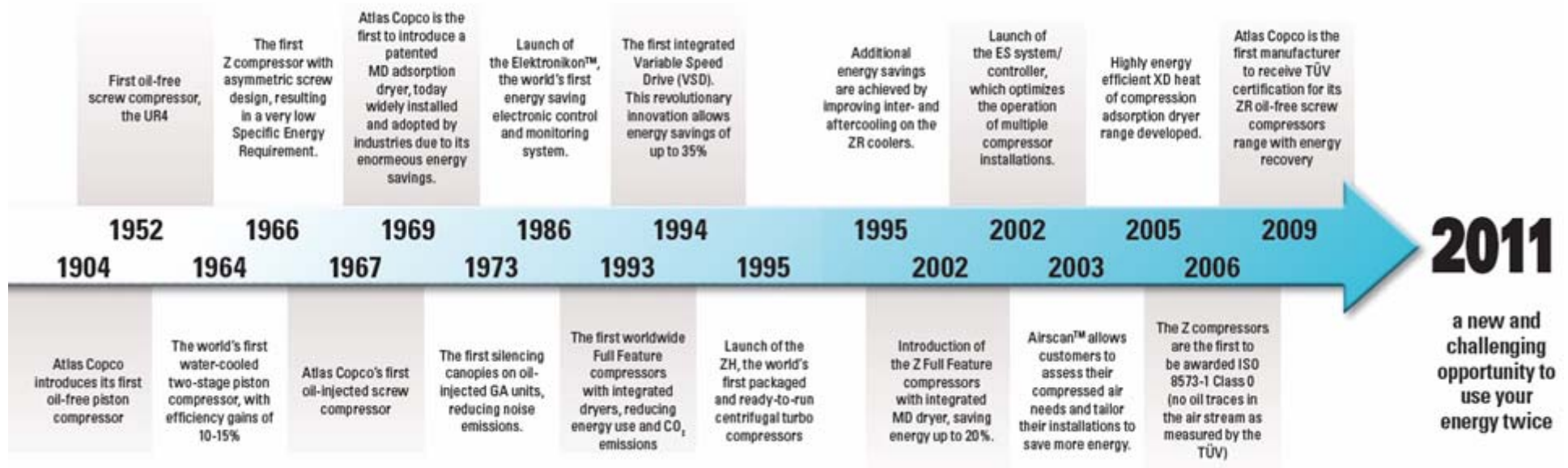
Annual Revenues **375 MEUR**

Certification ISO 9001, OHSAS 18001  
ISO 14001



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# Saving energy is our way of life



A century of innovation in energy saving features

Over 400 patents

# Energy Efficiency in Compressed Air Solutions

## What is Compressed Air?

- One of the most important utilities for industry.
- One of the largest consumers of energy:
  - 10% of total industrial electricity consumption
  - 40% of the electricity bill for certain plants.



**Any savings made in compressed air systems have a significant impact on costs and on the environment.**

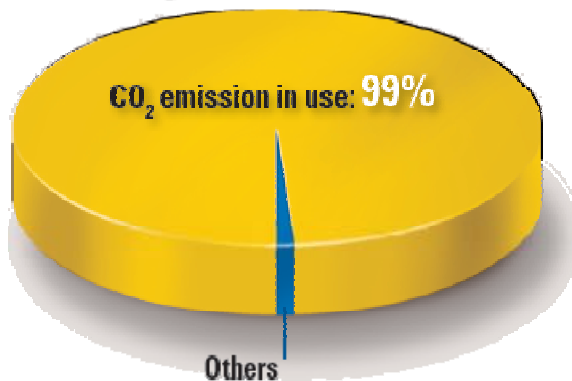


# Energy savings on compressed air benefit our customers and the planet

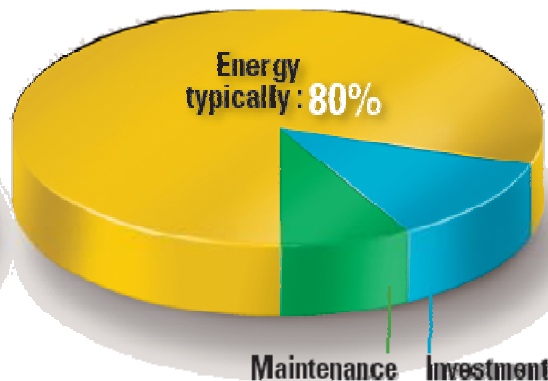
- Reducing the CO<sub>2</sub> footprint at every stage of a compressor's life time from 'cradle to grave'.
- Saving energy from the design phase right through to the equipment's manufacture, distribution, consumer use, disposal and recycling.



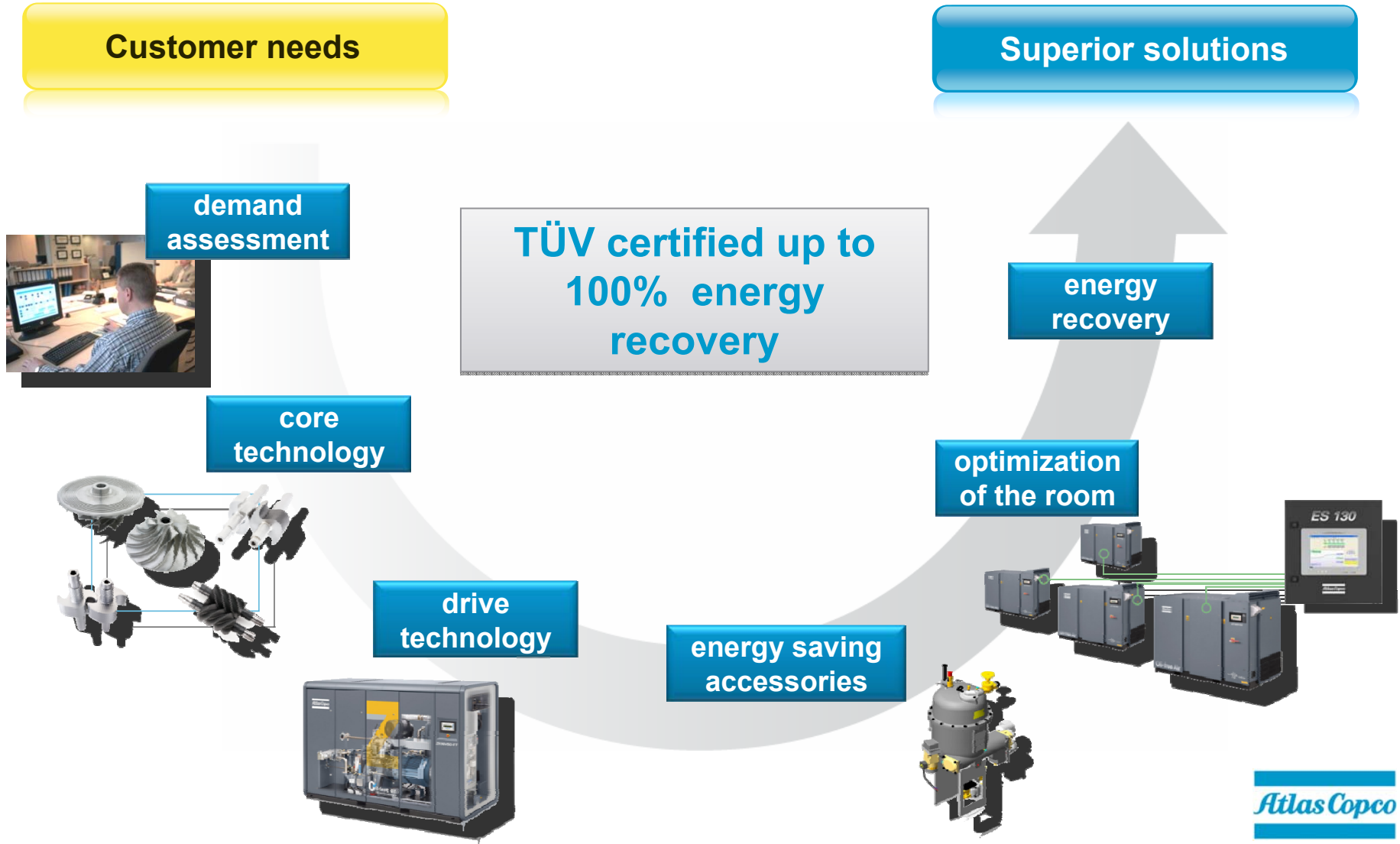
Typical CO<sub>2</sub> footprint of air compressors



Total cost of ownership



# Energy saving: comprehensive approach



# Product Portfolio to increase efficiency



# Unique Technology to increase Energy Efficiency

## Variable Speed Drive Technology:

Optimization of energy consumption

Energy Savings up to **35 %**



## Control & monitoring: Elektronikon

Monitor, control and measure energy consumption



## The Energy Recovery control unit

Energy Recovery control units are specifically designed to transfer the energy recovered from compressors to the customers' process.



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# Energy efficient solutions for Waste Water Treatment

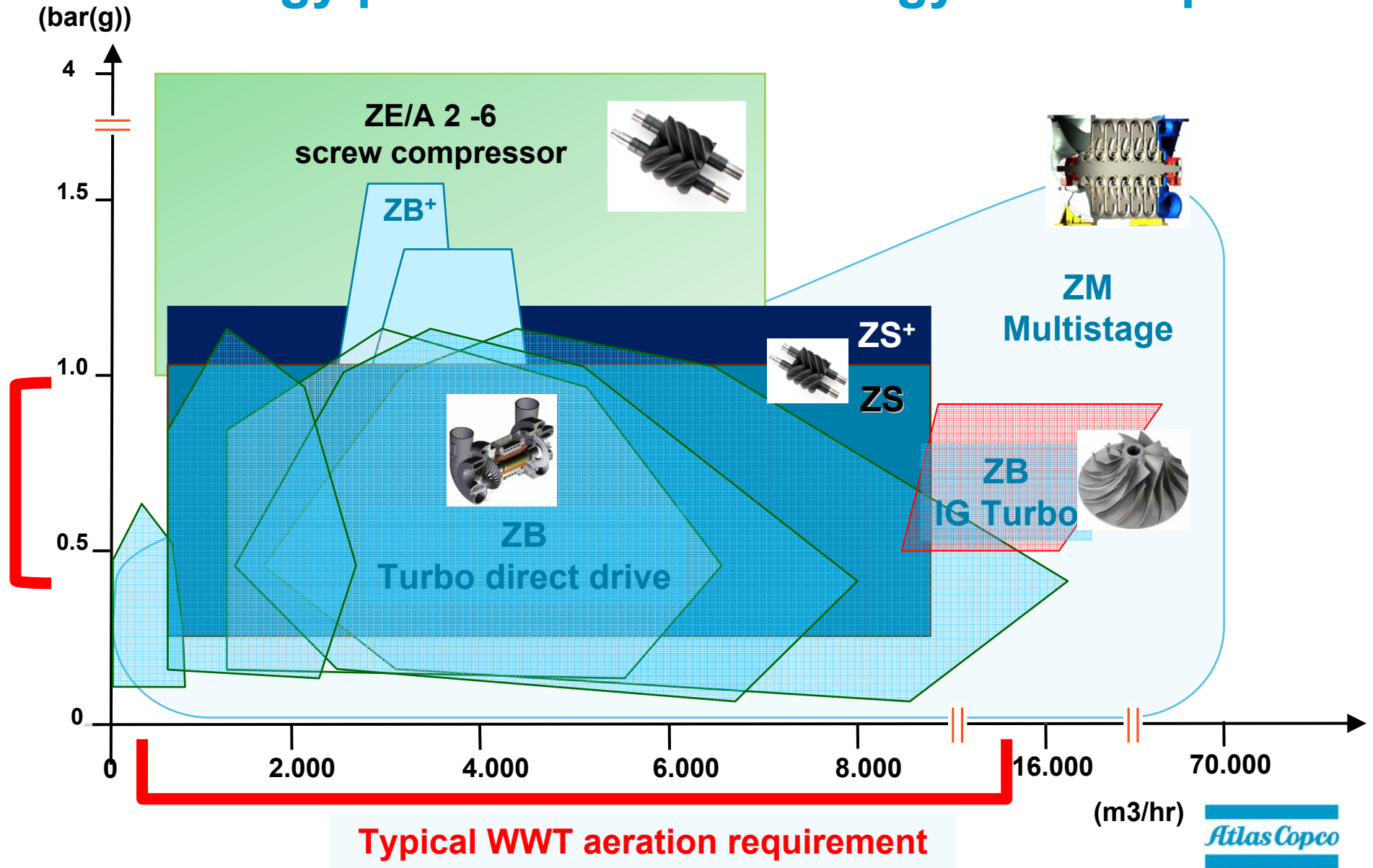


Just 10% of energy savings in the wastewater services sector could collectively save about \$400 million annually.

*According to the United States Environmental Protection Agency (EPA), "...approximately 56 billion kilowatt hours (kWh) is used for drinking water and wastewater services. Assuming an average mix of energy sources in the country, this equates to adding almost 45 million tons of greenhouse gases to the atmosphere. Just 10 percent of energy savings in this sector could collectively save about \$400 million annually*

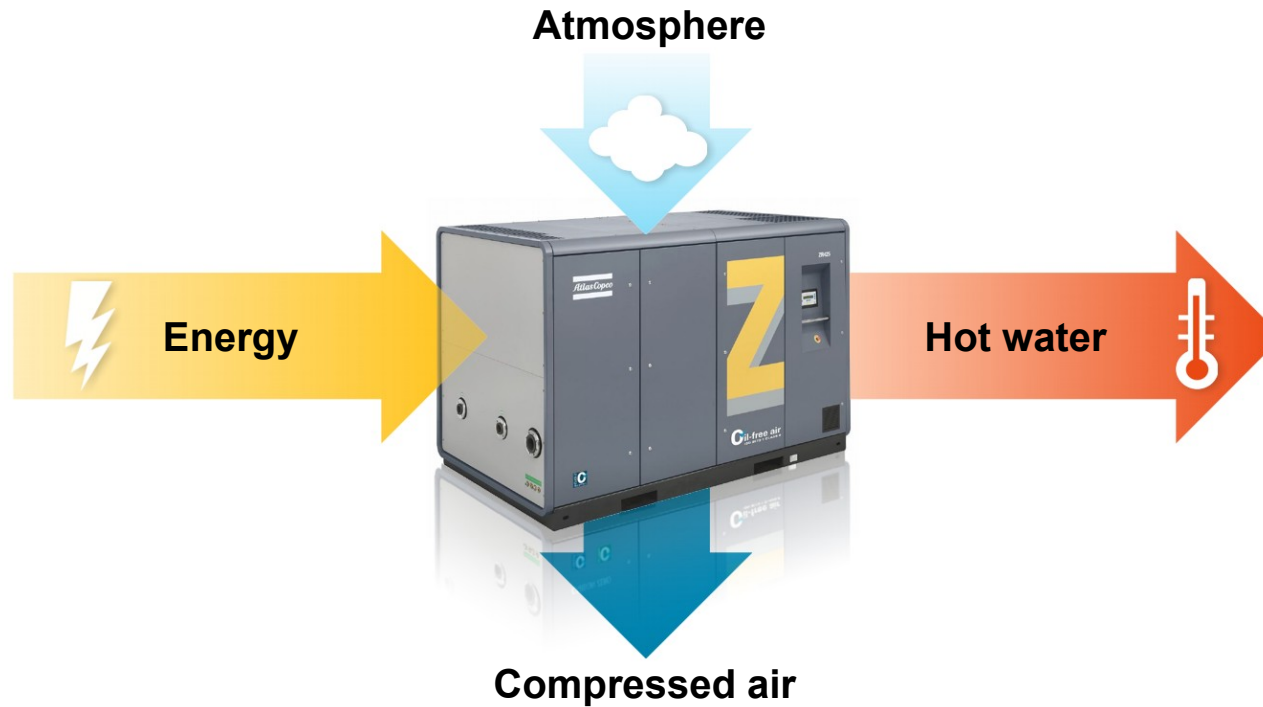
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# Technology portfolio for low energy consumption



# Energy-efficient compressors

## Atlas Copco's 100% energy recovery compressor



*10% of global industry's energy consumption comes from compressors;  
Atlas Copco can cut this substantially*





Type test of **ZR 55-750** range with built-in energy recovery systems

Comparison of the **electrical energy** consumption with **heat energy** recovered

### Certified results

- “**100%** of the electrical energy consumed could be recovered”
- “ net power (energy) consumption of the ZR compressor with built-in energy recovery at specific design conditions is **zero**”



# 'Use your energy twice' concept

## Cogeneration

- The creative concept is focused on [processes / industrial application](#)
- [Realistic](#) 90-95% recovery from 100% electrical energy input

**Switch your compressor  
into an energy source**



# Use Your Energy Twice website

- <http://www.useyourenergytwice.com>
- Technical details, applications, savings calculator, brochure and much more !

Atlas Copco Use Your Energy Twice | atlascopco.com

Energy in the industry | Use energy twice | Industries & applications | Compressors with energy recovery | FAQ | Media | Downloads | Contact us

Home

**Switch your compressor into an energy source!**

Using energy twice: it sounds hard to believe, but it is possible  
With the Atlas Copco ZR oil-free screw compressors it is reality!

**The electrical input power used for producing compressed air can be recovered as hot water and used for many industrial applications, space heating and sanitary purposes.**

The impressive **energy recovery technology** and **proven reliability** of our ZR oil free screw compressor will benefit both your bottom line and our planet.

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**Committed to  
sustainable productivity.**

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