

/ Perfect Welding / Solar Energy / Perfect Charging



# FRONIUS COMMERCIAL SOLUTIONS

THREE FACTORS TO MAKE  
YOUR SYSTEM MORE EFFICIENT

# THE FRONIUS ECO - THE COST-EFFICIENT OPTION

## BECAUSE QUALITY WORKS OUT CHEAPER

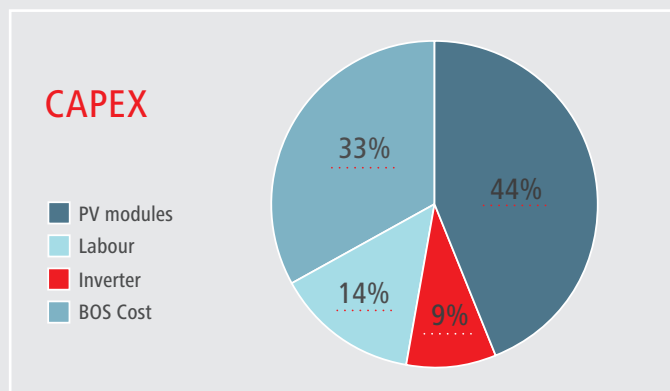
If you are looking for a high return on investment from your project in the long run, it does not make sense to only look at the purchase cost of an inverter.

The initial costs of the whole system, which are heavily influenced by the inverter, combined with the operating costs over its entire service life, are what really make the difference. Our comparison based on a roof-mounted system in northern Italy really shows why it is worth taking a closer look at the three factors of CAPEX, OPEX and returns on investment.

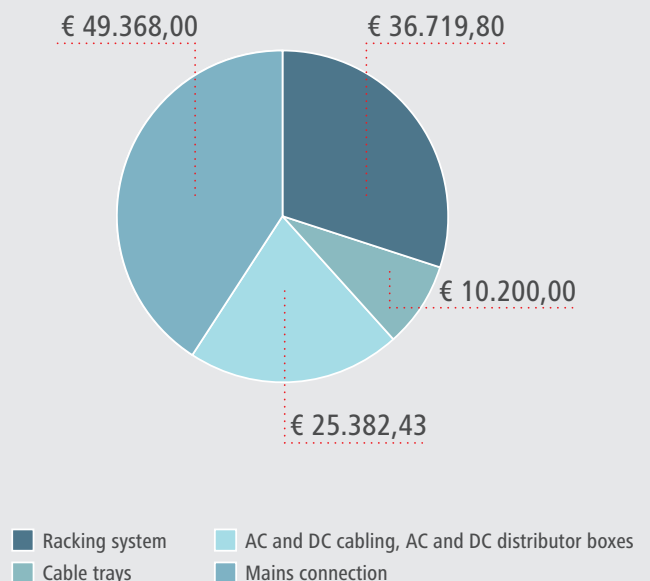


## CAPEX

The CAPEX – the capital expenditures or investment costs – of a PV system consist of the combined costs of the inverter, the module, the labour costs and the BOS (Balance of System) costs, which includes all additional expenditure for cabling, distributor boxes, etc. Inverters make up less than 10% of the CAPEX, but are responsible for 100% of the performance.

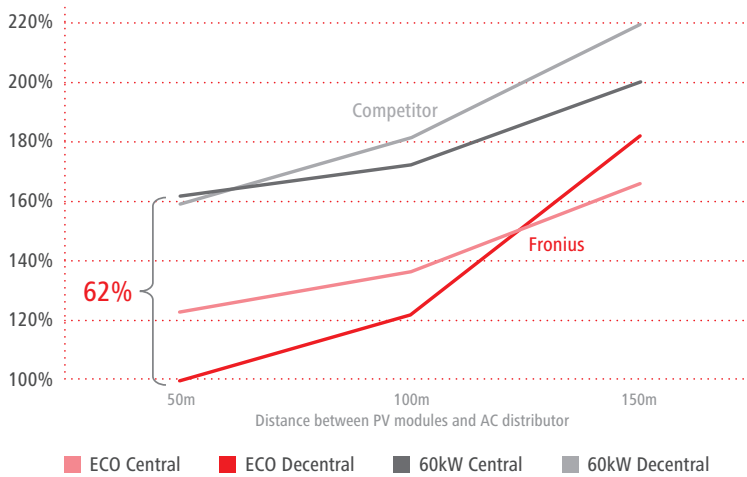


## BOS COSTS OF AN INSTALLATION WITH A 60 KW COMPETITOR INVERTER



# SAVE ON BOS COSTS WITH THE FRONIUS ECO

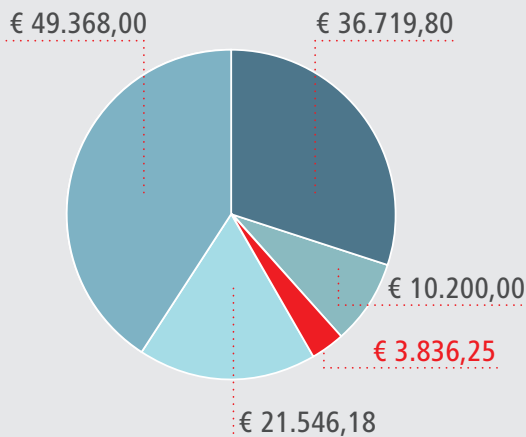
## BOS COSTS FRONIUS ECO VS. 60KW INVERTER



Comparisons with other 60 kW inverters – decentrally or centrally located – reveal that the Fronius Eco 27 kW has a cost benefit of 62%. These savings are the result of differences in the cabling and the necessary components for AC and DC distribution. The distances to be bridged between the inverter and the AC distributor are also significant.

With the DC Connector Kit 35, the Fronius Eco 27kW can also be used for centralised system designs.

## SAVE ON BOS COSTS WITH THE FRONIUS ECO



- Racking system
- Cable trays
- Savings
- AC and DC cabling, AC and DC distributor boxes
- Mains connection



The intelligent system design on the Fronius Eco allows you to save over €3.800 on the BOS.



## OPEX & RETURNS

BOTH COSTS AND RETURNS OVER THE ENTIRE SERVICE LIFE DETERMINE THE COST EFFECTIVENESS OF A SYSTEM.

Factors such as the Fronius PC board replacement technology, simple handling and active cooling technology ensure the lowest ongoing costs and highest returns. This makes the Fronius Eco 27 kW the smart choice when it comes to inverters.



# ACTIVE COOLING AND PC BOARD REPLACEMENT PROCESS - SAVE ON LONG-TERM SERVICE COSTS WITH THE FRONIUS ECO

When choosing an inverter, it all comes down to the service costs during the total lifetime of the inverter: in other words, the OPEX.

Active cooling eliminates the additional maintenance costs associated with passively cooled devices, which require extra cleaning of the housing (heat sink). Furthermore, the PC board replacement technology means our Fronius Service Partners can offer the fastest maintenance service on the market. This, along with its light weight and simple handling, means that the Fronius Eco is truly the most cost-effective alternative. The Fronius Eco 27.0 shows a cost benefit of more than €1000 per year in comparison to a passively cooled reference device.\*

\* Calculations are examples based on a 400-kW system

## LOWER COSTS - HIGHER RETURNS

When choosing an inverter, you cannot look at just the costs alone. An analysis only makes any sense when you take the returns into account. An example comparison with a passively cooled 33 kW device shows that the Fronius Eco achieves significantly higher returns due to better power derating behaviour. Over a period of 15 years, it works out that the Fronius Eco has a returns advantage of over €41,000\*.



# WHY CAN YOU RELY ON FRONIUS FOR COMMERCIAL PV SYSTEMS?

## SIX REASONS WHY FRONIUS IS ALWAYS THE RIGHT CHOICE:

- 1 THE FASTEST SERVICE ON THE MARKET**  
Fronius PC board replacement technology means that Fronius Service Partners can fix inverters directly in situ - saving both time and money.
- 2 NUMBER 1 FOR OPEX COSTS**  
Fronius inverters guarantee the lowest service costs - and that is over the entire service life of the device.
- 3 MINIMAL MAINTENANCE REQUIREMENTS**  
Fronius SnapINverters incur minimal maintenance costs, because the active cooling combined with proven Fronius quality mean they require barely any maintenance.
- 4 MAXIMUM FLEXIBILITY IN SYSTEM DESIGN**  
The combination of Fronius Eco and Fronius Symo guarantees an optimal design for every system.
- 5 ACTIVE COOLING TECHNOLOGY**  
Active cooling in the Fronius SnapINverter ensures better power derating behaviour, lower costs, a longer service life and increased returns.
- 6 EXPERTS IN SOLAR ENERGY SINCE 1992**  
Very few companies in this industry offer the experience and expertise that Fronius has acquired over its long and successful history.

/ Perfect Welding / Solar Energy / Perfect Charging

### THREE BUSINESS UNITS, ONE GOAL: TO SET THE STANDARD THROUGH TECHNOLOGICAL ADVANCEMENT.

What began in 1945 as a one-man operation now sets technological standards in the fields of welding technology, photovoltaics and battery charging. Today, the company has around 4,550 employees worldwide and 1,241 patents for product development show the innovative spirit within the company. Sustainable development means for us to implement environmentally relevant and social aspects equally with economic factors. Our goal has remained constant throughout: to be the innovation leader.

Further information about all Fronius products and our global sales partners and representatives can be found at [www.fronius.com](http://www.fronius.com)

v09 May 2018 EN

**Fronius India Private Limited**  
GAT no 312, Nanekarwadi  
Chakan, Taluka - Khed District  
Pune 410501  
India  
[pv-sales-india@fronius.com](mailto:pv-sales-india@fronius.com)  
[www.fronius.in](http://www.fronius.in)

**Fronius Australia Pty Ltd.**  
90-92 Lambeck Drive  
Tullamarine VIC 3043  
Australia  
[pv-sales-australia@fronius.com](mailto:pv-sales-australia@fronius.com)  
[www.fronius.com.au](http://www.fronius.com.au)

**Fronius UK Limited**  
Maidstone Road, Kingston  
Milton Keynes, MK10 0BD  
United Kingdom  
[pv-sales-uk@fronius.com](mailto:pv-sales-uk@fronius.com)  
[www.fronius.co.uk](http://www.fronius.co.uk)

**Fronius International GmbH**  
Froniusplatz 1  
4600 Wels  
Austria  
[pv-sales@fronius.com](mailto:pv-sales@fronius.com)  
[www.fronius.com](http://www.fronius.com)