Agenda

1. Introduction of ZON Energie as an Energy Service Company
2. Hot Domestic water and solar
3. Our solar production units
4. Next generation
ESCo company

- More than 25 years of experience in the Solar and Heatpump sector
- Responsible for more than a hundred projects in the Netherlands
- Active in several countries in the Netherlands, Eastern Europe and South Africa
- Solar as an unique selling point for years

Design -> Build -> Finance -> Maintain & Operate
We always start at the customer as an Energy Service Company.

- Hot Domestic Water
- Comfort
- Satisfaction of our customers
- Maximum
- Renewable with best business case

CO₂

Maximum Renewable with best business case
Special attention for the HDW distribution system

Conventional circulation system:
- Simple and secured
- More bigger distribution pipes
- More pumping energy
- Energy loses about 5 GJ/app./year

Double feded circulation system:
- More difficult to engineer
- Lesser pipes, lesser energy losses
- More comfort
- Energy loses about 2 GJ/app./year
Solar production units
25 years of experience

2002: 2 MW solar thermal energy in combination with a gas driven Heat pump

2015: PV and Solar Thermal solar in combination with an electrical Heat pump
Future solar production units

High Temperature heatpump
(40 - 65 C)

Low Temperature heatpump
10- 40 C

Hot Domestic water boiler
Automatic Demand Response
(next step with solar and Heat pumps)

Hero Balancer
• Robot to organise the best value for money without losing comfort
• Based on artificial intelligence and one day ahead energy prices
• Solar systems and Heat pumps as flexible storage medium
• Proof of principles since 2015