

Manufacturers' Experience with GSCN

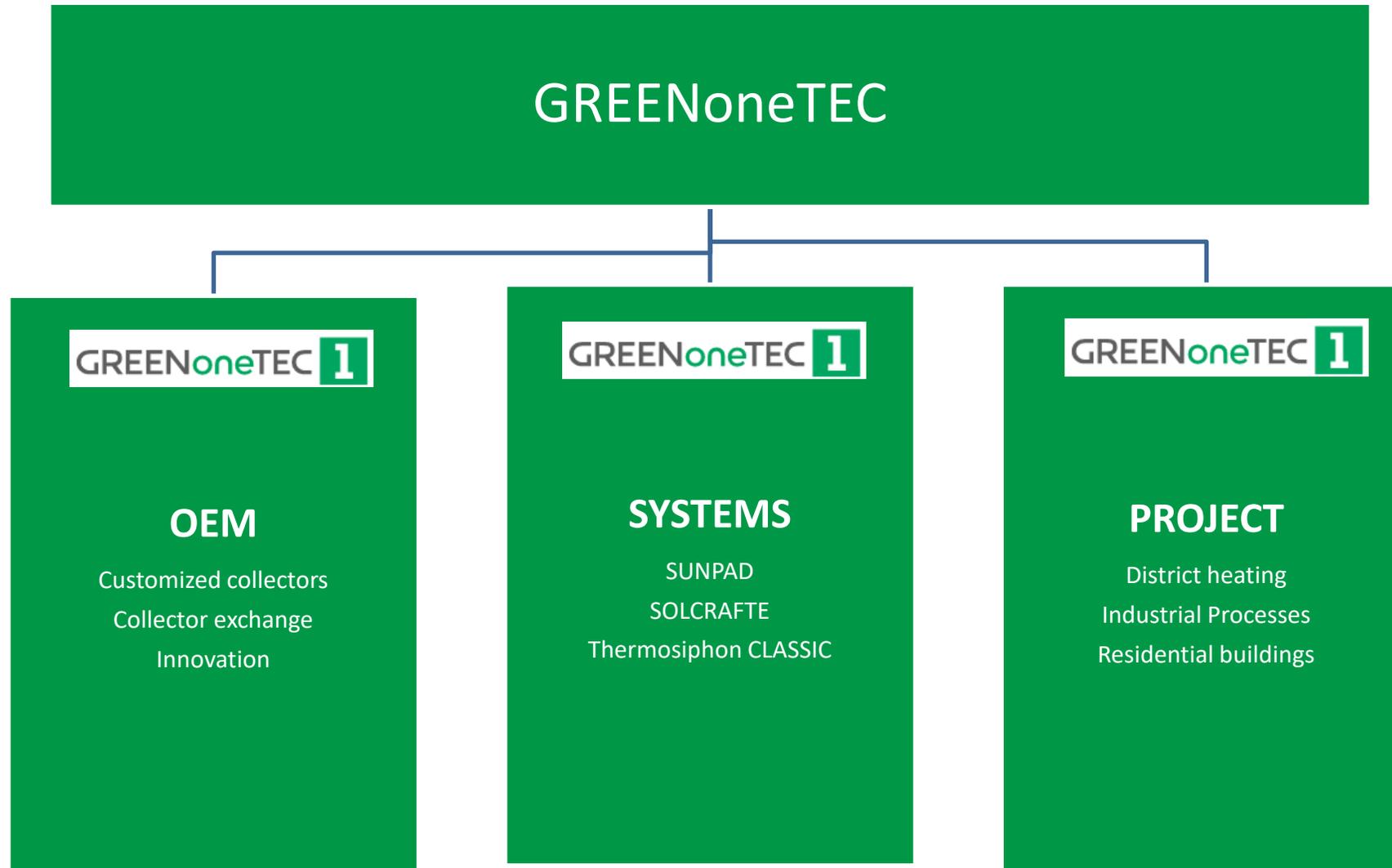
DI Poscharnig Harald, 20.03.2023

SETTING
GLOBAL
STANDARDS

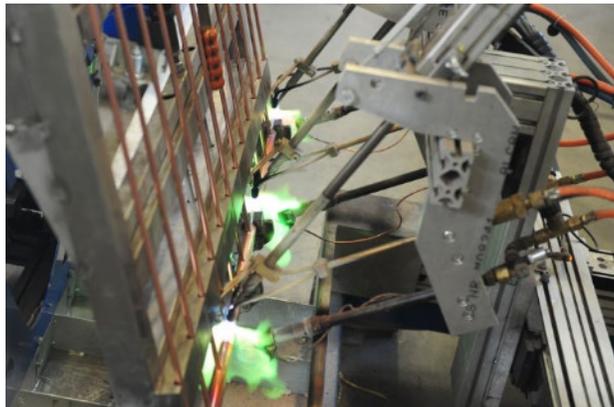
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GREENoneTEC – BUSINESS UNITS

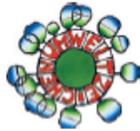


GREENoneTEC | FACTS & FIGURES



- Production volume 2022: 560.000 m²
- Export quote > 85 %
- Sales > 100 countries
- Production capacity:
1,6 Mio. m² (3-shift)
- Fully automated production facilities on
28.000 m² with robot systems
- Laser welding (3 machines)
- Automatic meander bending machine
- Automatic brazing centers

PRODUCT & SYSTEM CERTIFICATES



- Solar Keymark
- Austria Solar Gütesiegel (AT)
- Österreichisches Umweltzeichen (AT)
- CSTBat (FR)
- MCS (UK)
- SRCC (USA)
- ICC-ES PMG Listing Mark (USA)
- DCL – Dubai Zertifikat
- Global-Mark Zertifikat

Costs for certification, inspection

- *Number of collector certificates GoT:* more than 60 certificates
- *Time spent internally for physical inspection:*
 - Preparation: 2 days for one person → 850 Euro
 - Inspection: 2 days/2 person plus 10 hours of colleagues, which are involved in the inspection process like purchasing, complaint management, quality management, production..... → 2.200 Euro
- *Travel costs Inspector:* approximate 800 Euro/inspection
- *Costs of initial or repeat inspection:*
 - approximate 10.000 Euro for the performance and quality testing
 - plus costs for the necessary production of collectors, approx. 2.000 Euro

Possible savings if GSCN are in full operation

Assumption based on GoT with 6 different certificates (Solar Keymark, SRCC, CSTBat, MCS, DCL, Global Mark) and only one necessary initial test.

| | | now | possible future | possible savings – best case |
|-----------------|--|--------------------------------|------------------------|-------------------------------------|
| Initial testing | Production of collectors and necessary testing, transport..... | 12.000 Euro x 6 72.000 Euro | 15.000 Euro | 57.000 Euro |
| | Travel cost inspection and collector - selection | 800 Euro x 6 4.800 Euro | 800 Euro | 4.000 Euro |
| | Internal preparation (one day) | 425 Euro x 6 2.550 Euro | 1.000 Euro | 1.550 Euro |
| Total: | | 79.350 Euro | 16.800 Euro | 62.550 Euro |

Possible savings if GSCN are in full operation

Assumption based on GoT with 6 different certificates (Solar Keymark, SRCC, CSTBat, MCS, DCL, Global Mark) and only one necessary initial test.

| | | now | possible future | possible savings – best case |
|---------------------|--|---------------------------------------|------------------------|-------------------------------------|
| periodic inspection | Internal preparation (one day) | 425 Euro x 6 2.550 Euro | 1.000 Euro | 1.550 Euro |
| | Travel cost inspection for collector - selection | 800 Euro x 6 4.800 Euro | 2.000 Euro | 2.800 Euro |
| | Inspection (time of colleagues) | 425 Euro x 2p x 2d x 6 10.200 Euro | 3.500 Euro | 6.700 Euro |
| Total: | | 17.550 Euro | 6.500 Euro | 11.050 Euro |

Conclusion:

- We have a preliminary theoretical savings potential of approx. **10.000 euros per certification scheme** for each new collector type/family if we can manage that one common initial test would be enough for several certificate schemes.
- In case of periodic inspection, savings of approx. **2.000 euros per certification scheme** are possible, if one inspector is authorized to check the different requirements of the certification bodies.
- SRCC is the best example how it could work. The cooperation works well from the point of view of the manufacturer.
- We need more such cooperation like SRCC!!
- It takes really a lot of time to find the right contact person and the willingness of all involves parties to change existing certification rules
- One initial testing at the beginning would be great. Maybe it could work like we do with the patents. First do a complete testing and afterwards take the decision, which certificate schemes are needed.
- **GSCN NEED MORE INDUSTRY PARTNERS!! YOU ARE WELCOME!!**

Thank's for your attention!!

