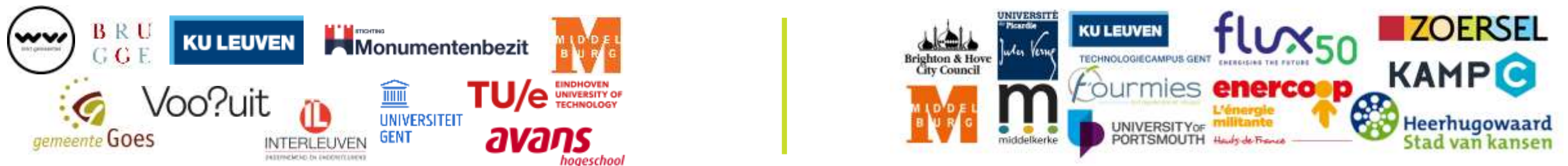




Onzichtbaar energie opwekken op monument

Ruud Derks – Q-Roof B.V.

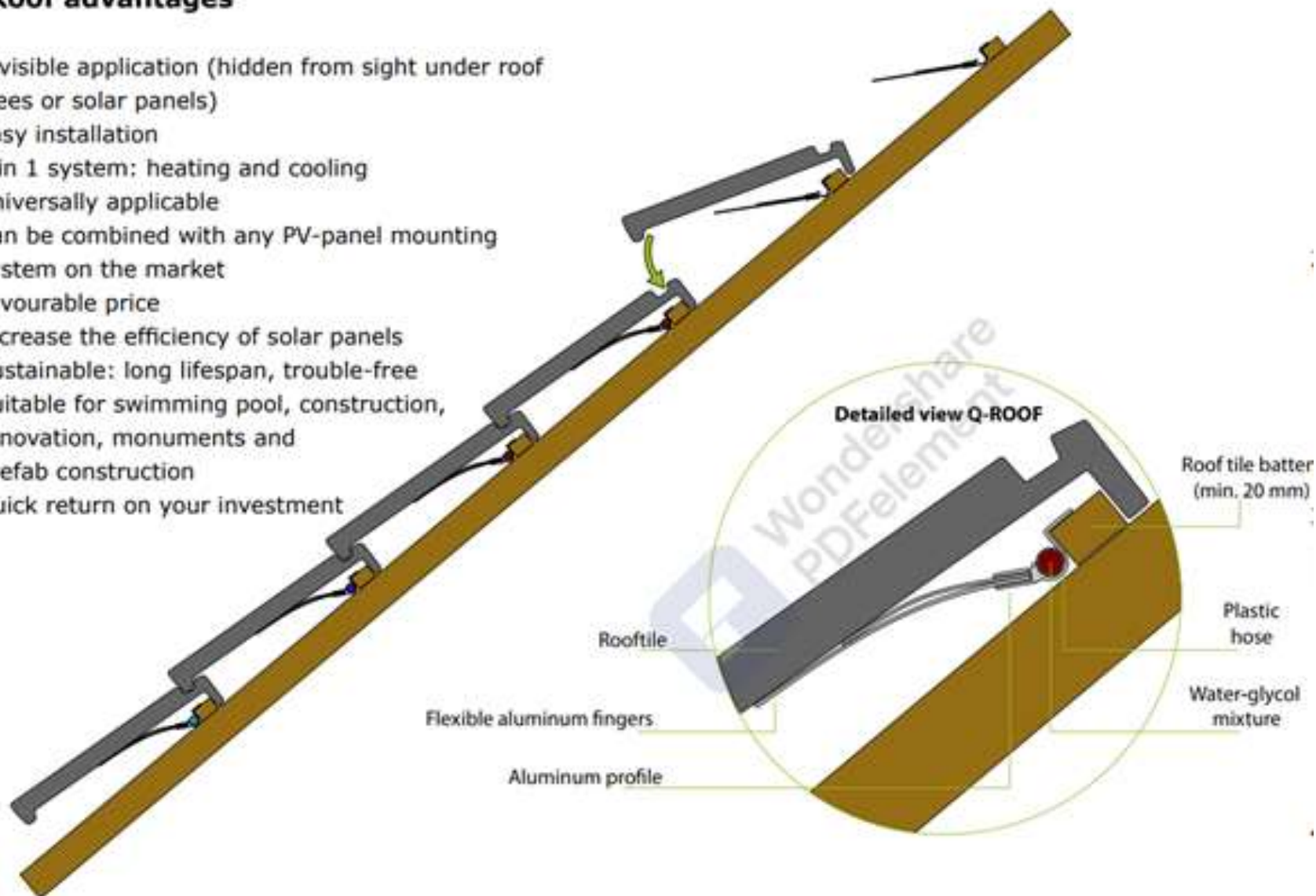
28 januari 2022



Short movie on Middelburg project

Q-Roof advantages

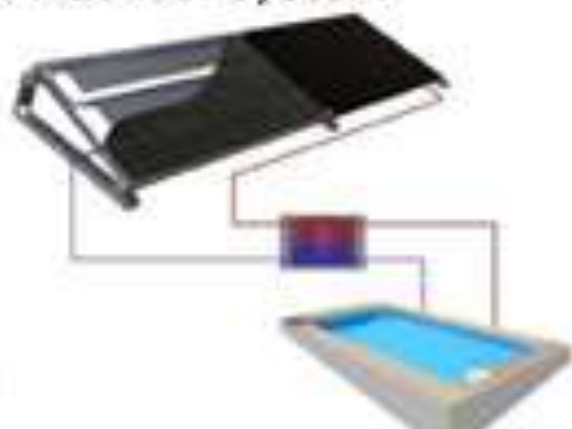
- Invisible application (hidden from sight under roof tiles or solar panels)
- Easy installation
- 2 in 1 system: heating and cooling
- Universally applicable
- Can be combined with any PV-panel mounting system on the market
- Favourable price
- Increase the efficiency of solar panels
- Sustainable: long lifespan, trouble-free
- Suitable for swimming pool, construction, renovation, monuments and prefab construction
- Quick return on your investment



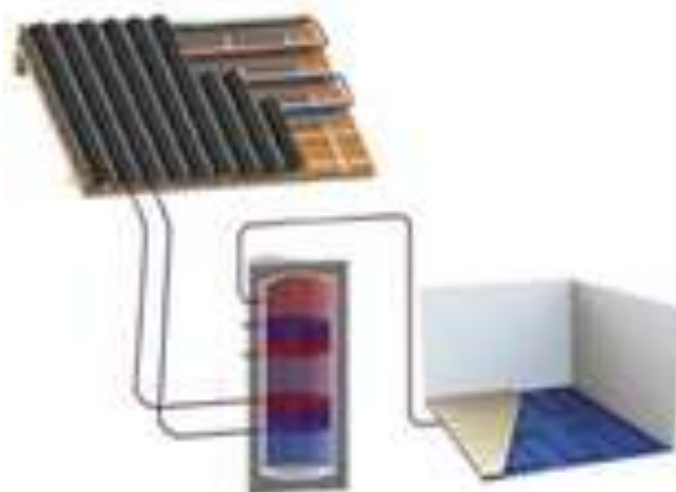
1. Solar panel system



2. Flat roof system



3. Roof tile system



4. Facade panel system

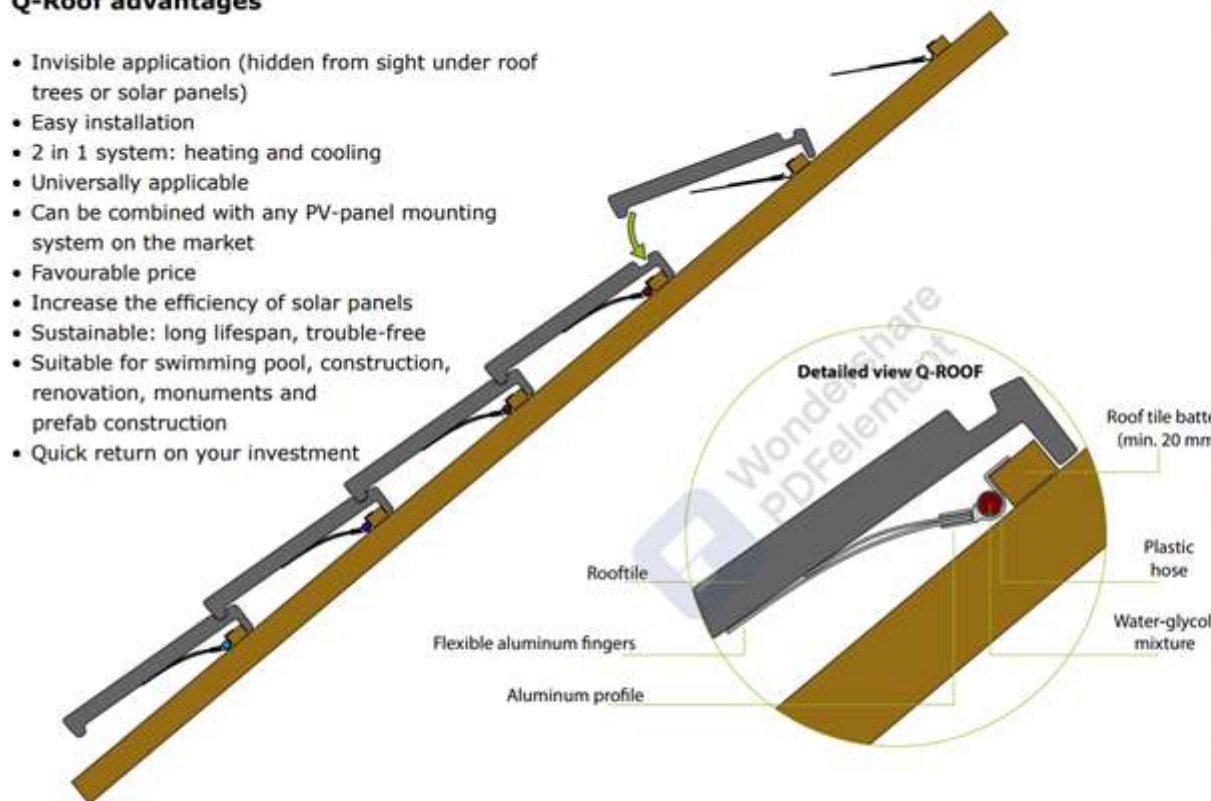


Our invisible Q-Roof system is suitable for every roof and produces sizeable solar heat

Terms: 20 mm space needed between rooftop (for example: tile or solar panel) and substratum

Q-Roof advantages

- Invisible application (hidden from sight under roof tiles or solar panels)
- Easy installation
- 2 in 1 system: heating and cooling
- Universally applicable
- Can be combined with any PV-panel mounting system on the market
- Favourable price
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Q-Roof Facts and numbers

170 watt output per square meter
Maximum yield 4.9 GJ for 6 square meter in an optimal system
Calculation basis: yearly average of 1.600 hours of sunshine in the The Netherlands

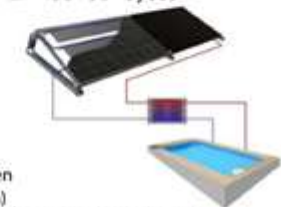
WWW.Q-ROOF.NL

1. Solar panel system



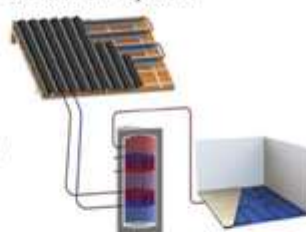
Swimming pool area = Q-roof area

2. Flat roof system

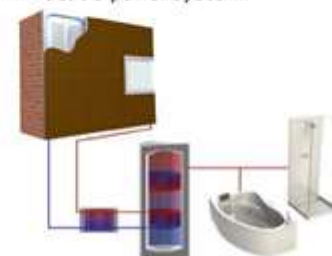


100% of floor heating area requires 50% of Q-roof collector area

3. Roof tile system



4. Facade panel system



6 square meter Q-roof is sufficient for a family of 4 persons

Voorbeelden gerealiseerde projecten

- | | |
|--------------------------|--|
| • Rijksmonument Grathem | Q-Roof onder dakpannen, warm water voorziening |
| • Hoeve Nieuw Ehrenstein | Q-Roof samen met WKO om bron in zomer op te warmen |
| • Stadhuis Utrecht | Q-Roof onder dakpannen, warm water voorziening |
| • Stadhuis Middelburg | Q-Roof onder lei, warm water voorziening |



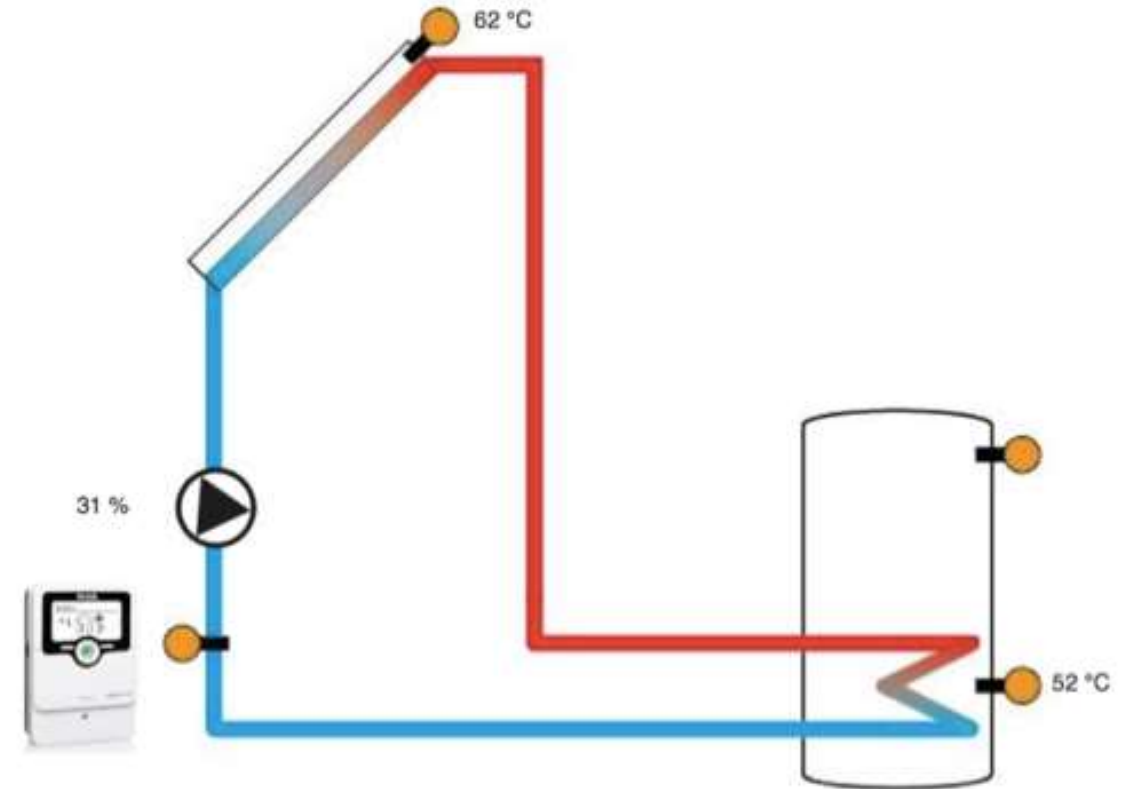
Q-Roof onder lei op monumentaal stadhuis Middelburg



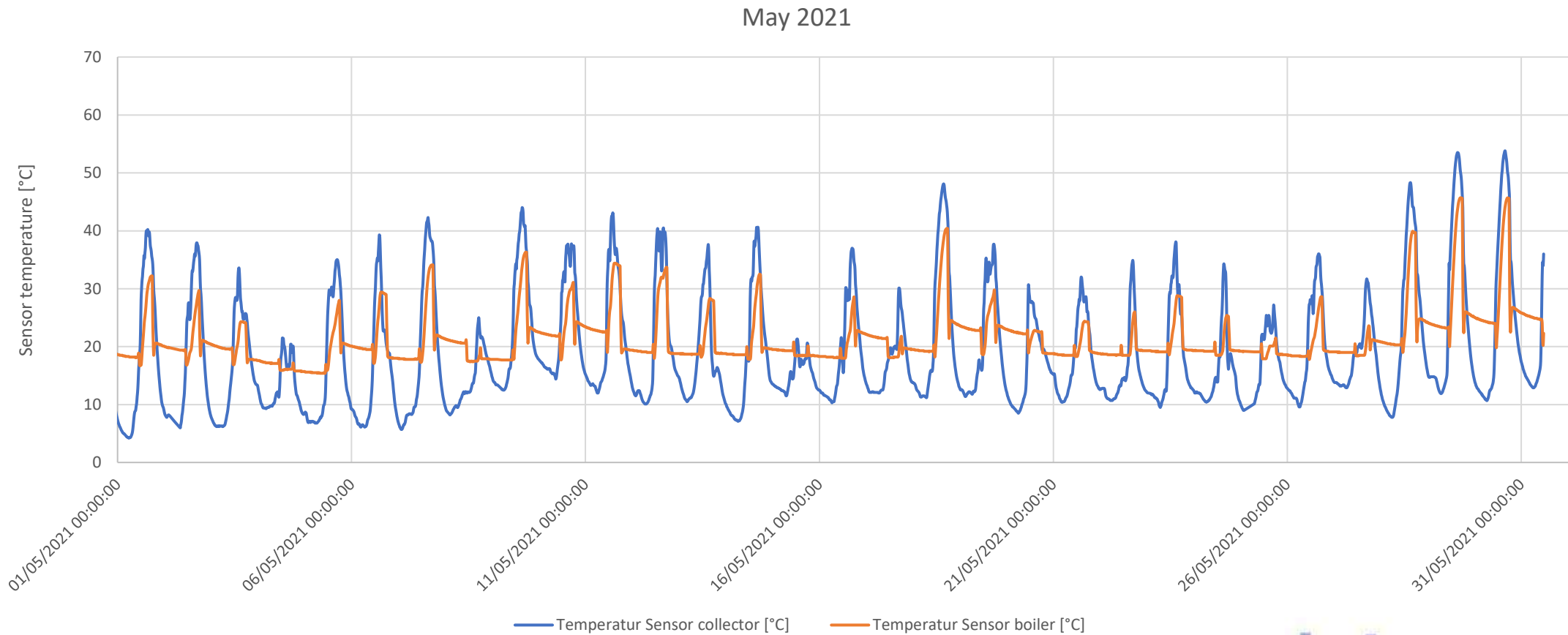
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Dagen actief 85

Interreg 
2 Seas Mers Zeeën
SOLARISE
European Regional Development Fund

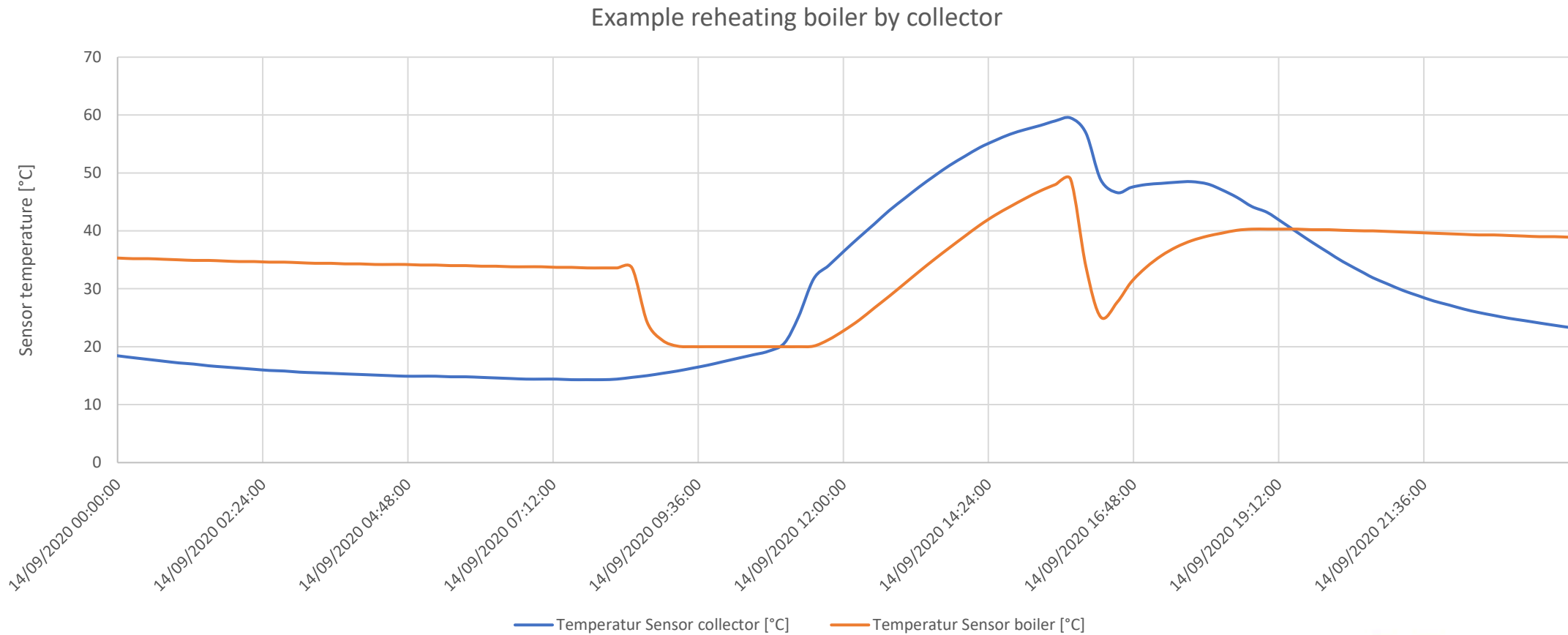


Verloop temperaturen over een maand mei

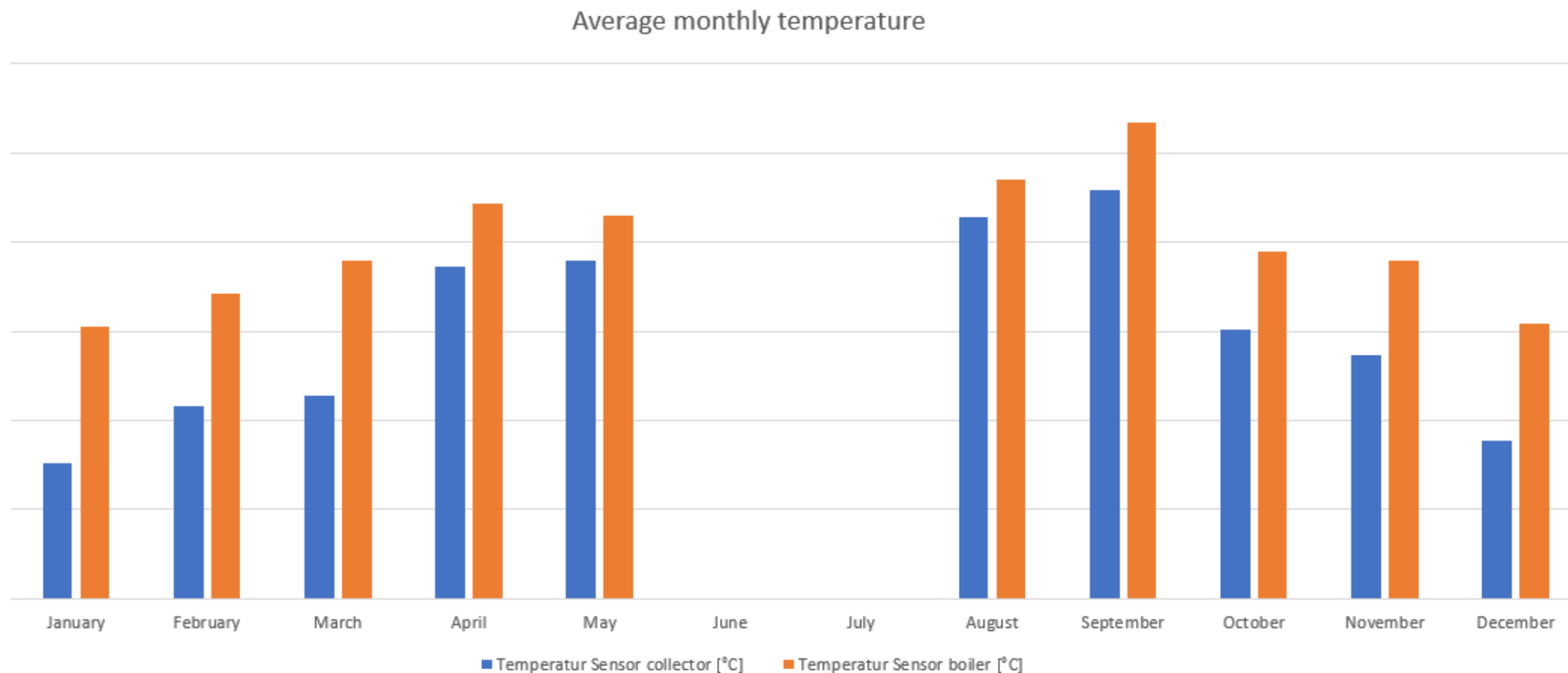


Voorbeeld opwarming op een dag in september

(afname warm water om 09.00 en 15.30 uur)



Verskil gemiddelde T van boiler en buiten sensor



Q-Roof onder lei op monumentaal stadhuis Middelburg



Systemdatum 09/15/2020 15:34:34

Dagen actief 85

Samenvatting:

- Werking onder lei > onder dakpannen
- Zelfs bij -5 buiten, kan collector naar 35 graden
- Weinig wind en scherpe zon zijn ideaal
- In zomer kan vloeistof opwarmen tot 82 graden
- Opbrengst sterk afhankelijk van afname patroon
- Bij gebruik van meer warm water -> grotere besparing
- Zeer geschikt voor opwarming “bron” in zomer bij WKO

