SunStore Cooker – A battery type solar cooker charged by an automated sun tracking system

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Heliac Solar Cooker

- Tested in 4 countries
- Cooks at temperatures comparable to biomass
Heliac Solar Cooker

• Challenges
  - the size too big to store and to transport
  - tracking of the sun
  - cooking stops when a cloud appears

• Cultural barrier and behaviour change
The concept of SunStore Cooker

- Solar cooking after dark
- No need to adjust timing of cooking
- Easy use – no need for long-term follow up
- Central charging system
SSC facts

- Content: a mixture of molten salt
- Size (Ø25cm, height 25cm)
- Weight 23kg
- Max temperature 300°C
- High heat 2 - 3 hours
- Lower heat 6 - 7 hours
Construction
The charging unit
Charging unit – how it works

- 8 lenses – 8 SSC charging at once
- Automatic tracking system
- Charging takes 3 - 4 hours
- Each lens produces 1.2 kW
SSC operation model
Ecosystem

1 Charging unit + 32 SSC

Heliac

$6000

Distributor

$7000

Business owner

1 set installed

Bank/Microloan

$2639/ year x 3 years

$7000 @ 13% interest

$3888/year

End Users

Heliac

SSC rental

$6000

$7000

$7000
Further development

• Identifying best materials for SSC
• Insulation to keep high heat for a long time
• Develop and test business model
Thank you!

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