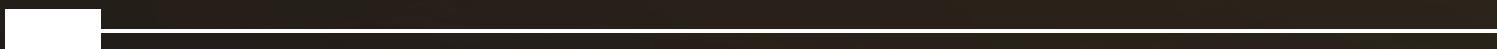
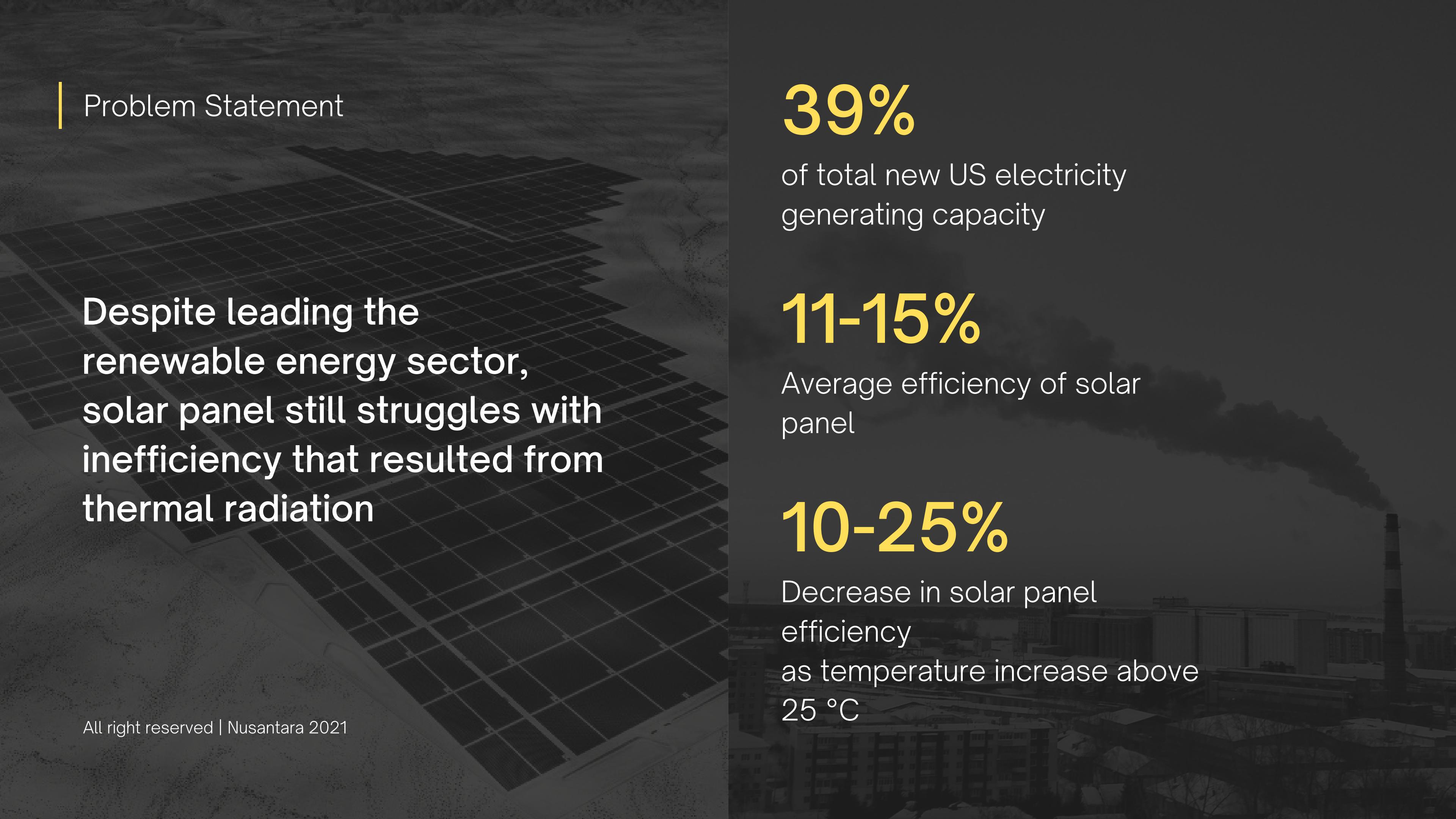


SOLJEL

Highly-efficient, Vaseline-based, Solar Panel Cooling System



A wide-angle photograph of a massive solar farm. The panels are arranged in long, parallel rows that stretch across the frame. The perspective is from a low angle, looking up at the panels. The sky above is filled with heavy, grey clouds, creating a dramatic backdrop for the renewable energy installation.

Problem Statement

Despite leading the renewable energy sector, solar panel still struggles with inefficiency that resulted from thermal radiation

39%

of total new US electricity generating capacity

11-15%

Average efficiency of solar panel

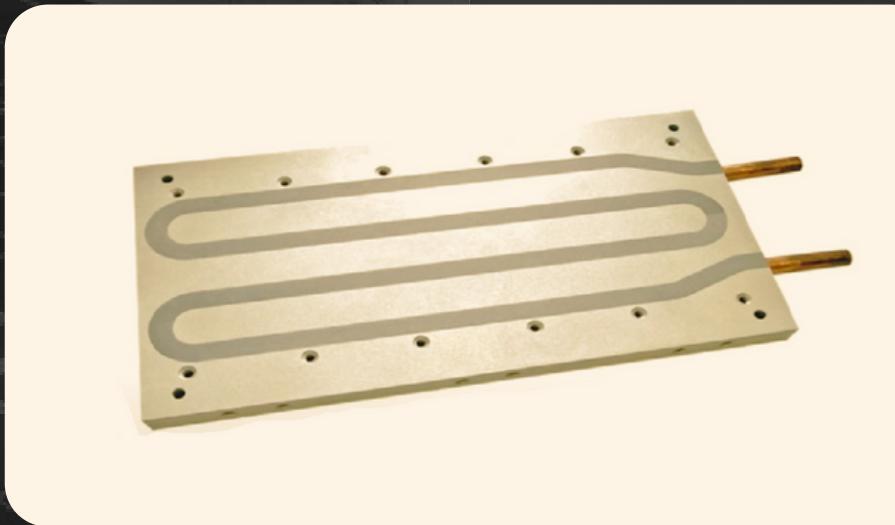
10-25%

Decrease in solar panel efficiency as temperature increase above 25 °C

Problem with Current Cooling Solution



**Thin-Film
Rare, Toxic**



**Alum. Jacket
Expensive**



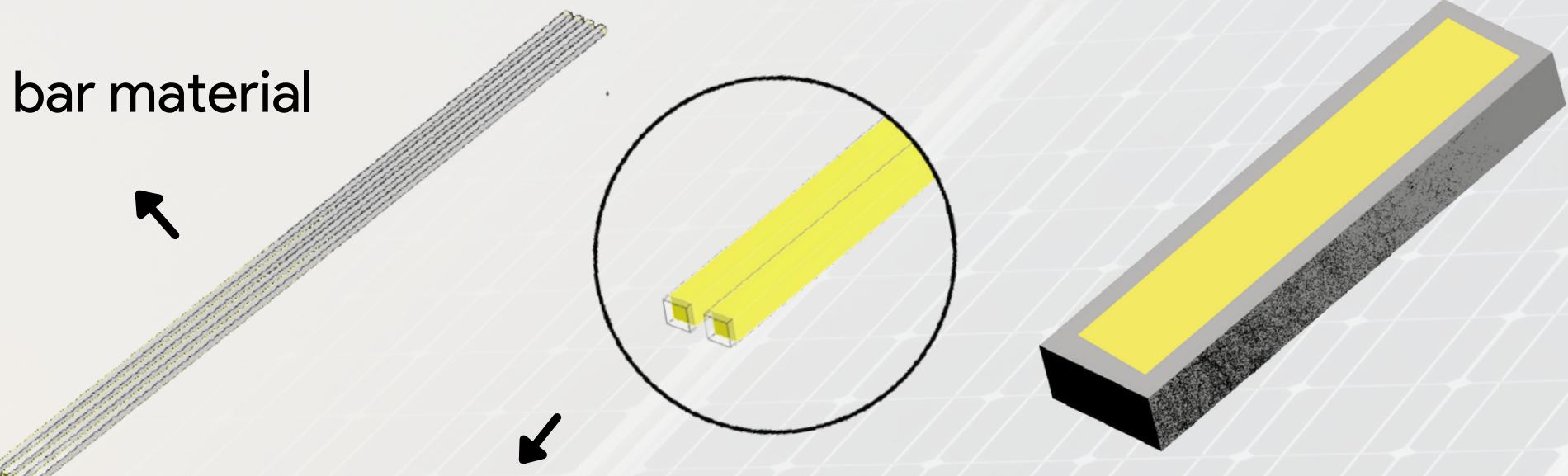
**Water Spray
Wasteful, Inefficient**

Proposed Solution

SolJel (Solar Jelly)

Soaks heat during the day, release by night

Aluminium as bar material



SolJel (Vaselinum Flavum)

Reduce
8-15%
efficiency
decrease

Long lasting
up to
40 y.o.
system
resistance

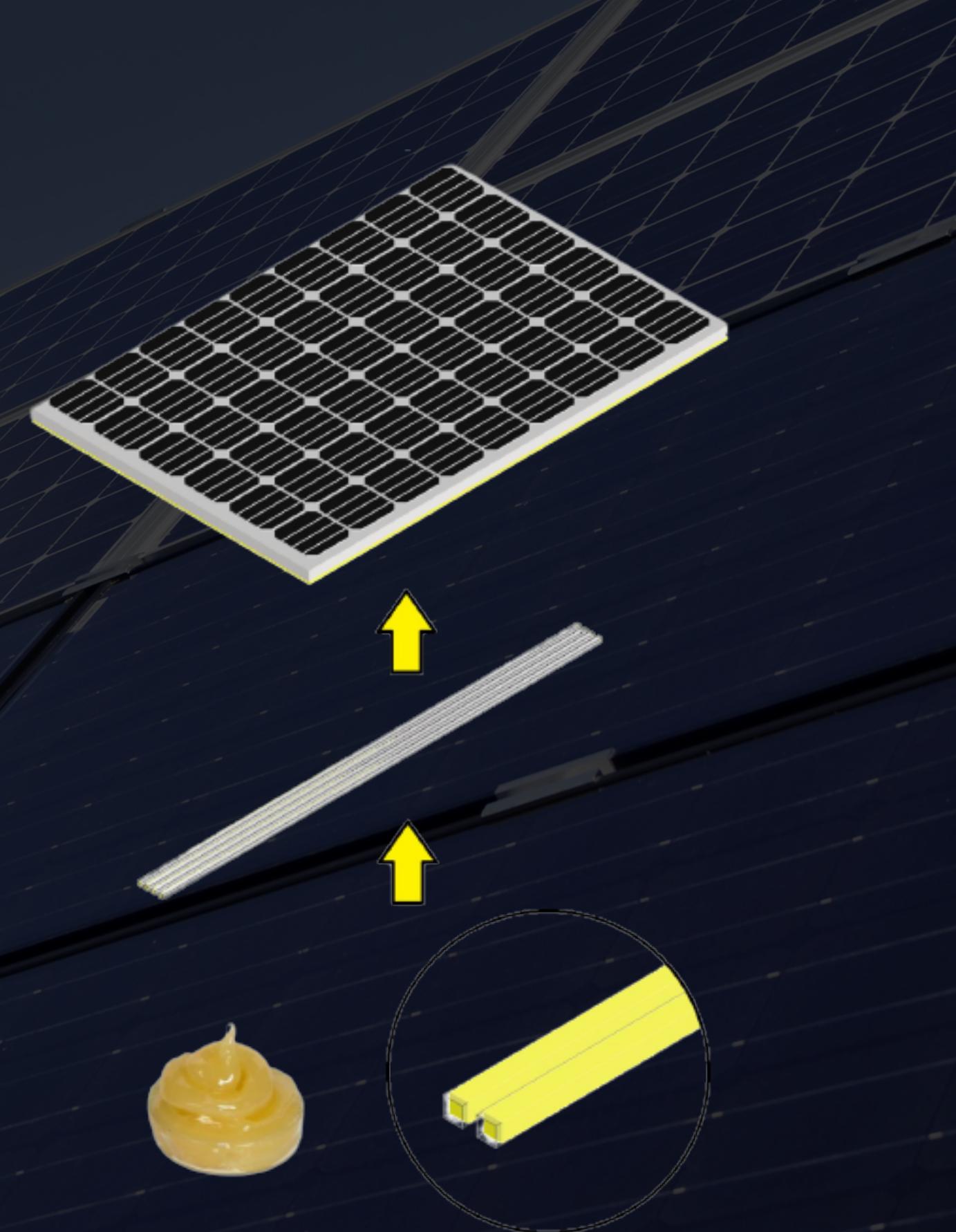
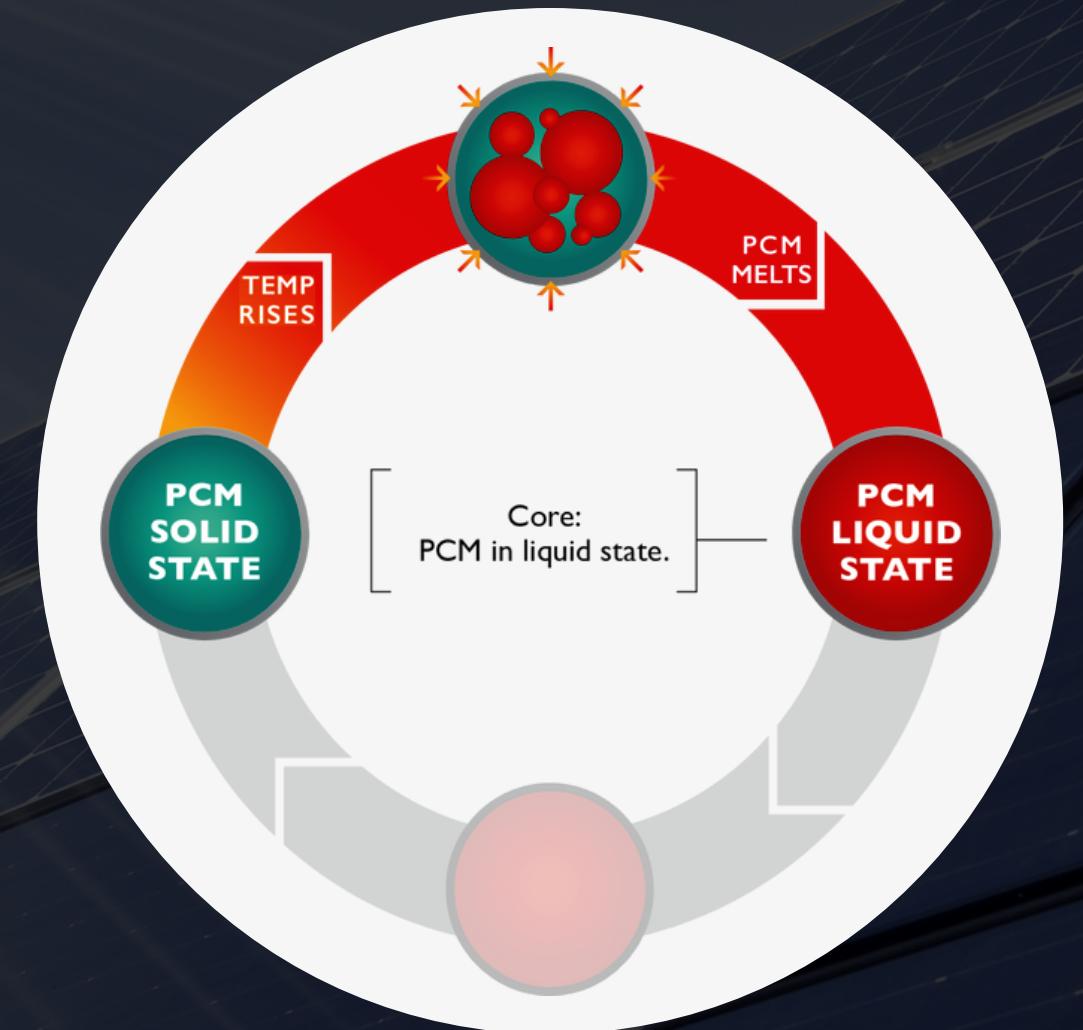
19%
cheaper in
electricity bills

a complementary product of a
solar panel system utilizing
Phase Change Material (PCM)
as the passive cooling system

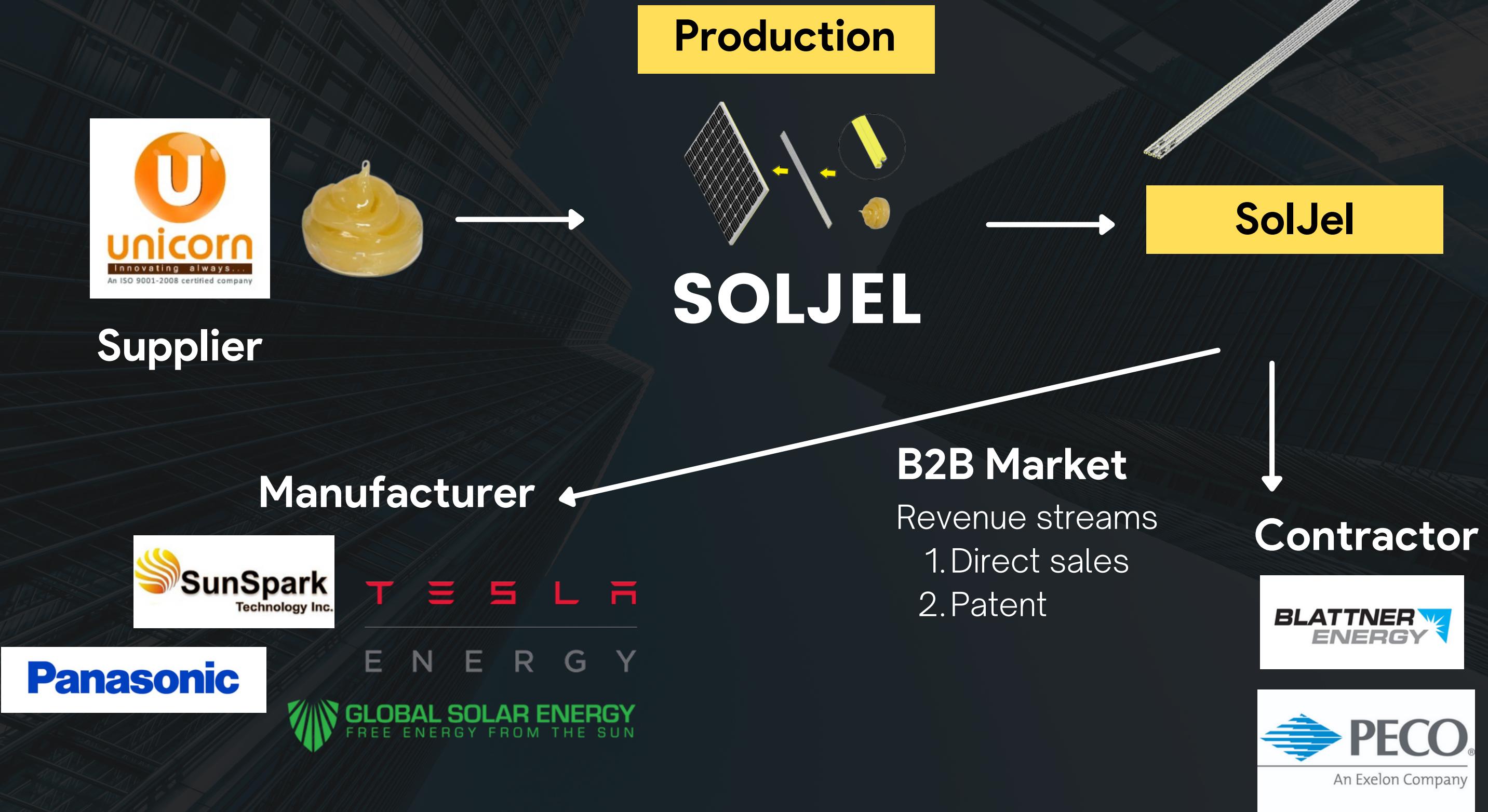
Mechanism

Customizable PCM-filled Bar Fit to different solar panels

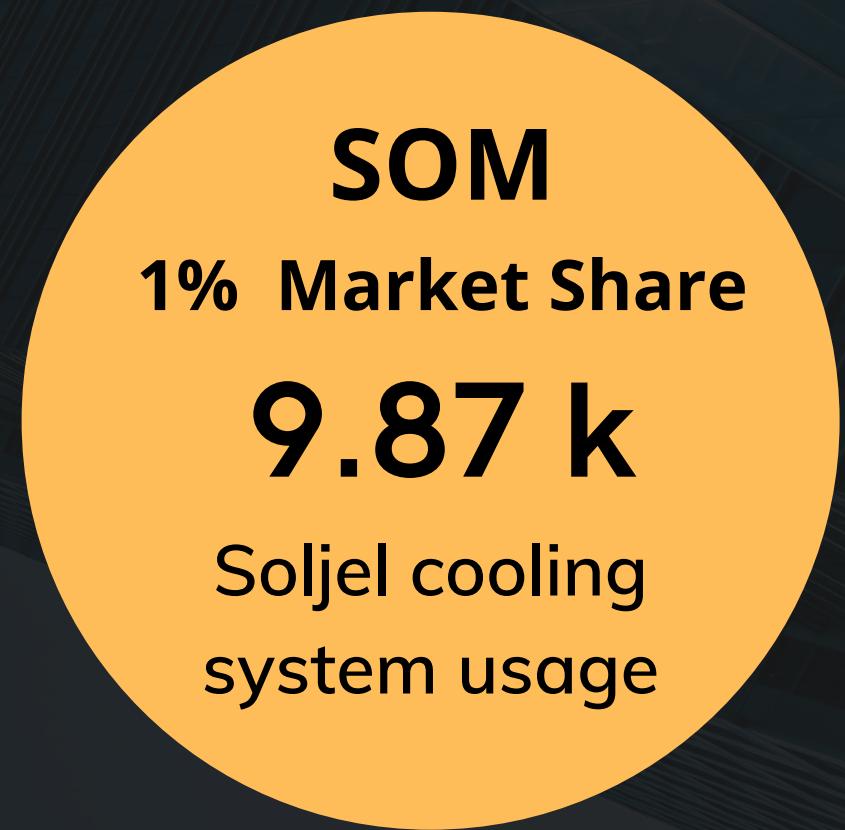
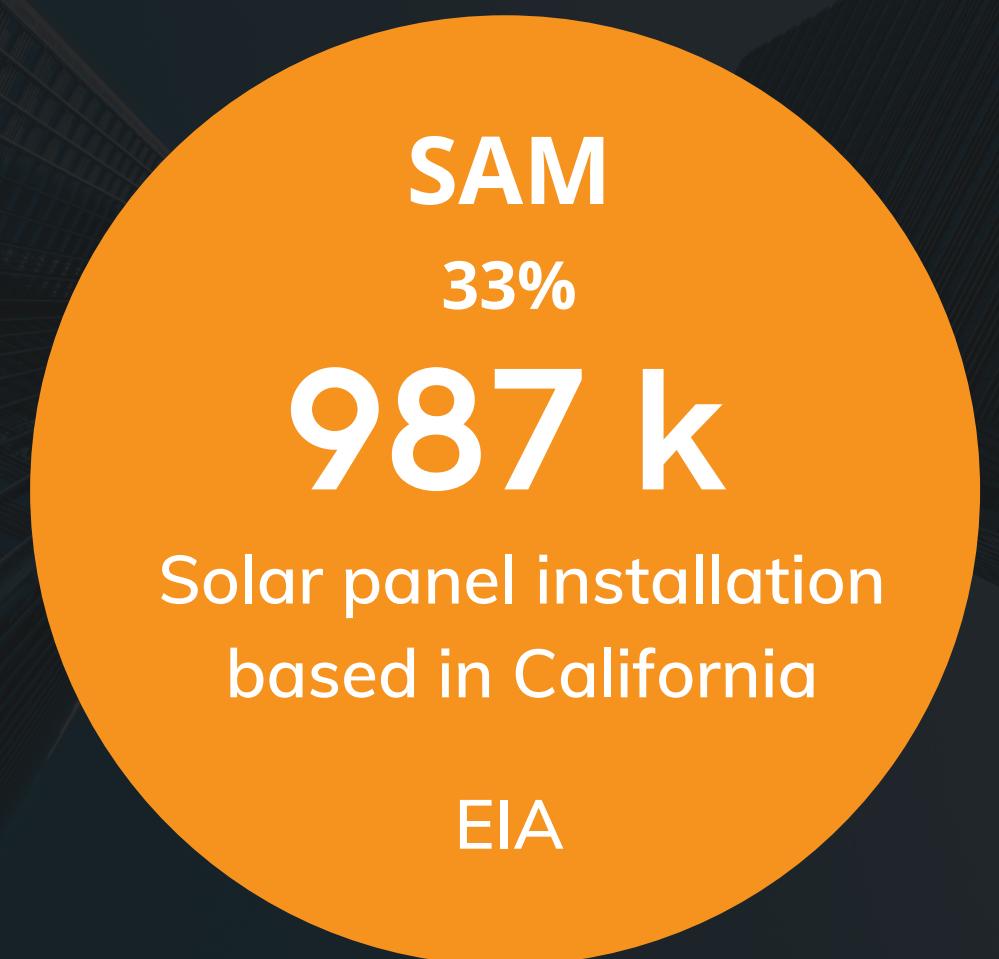
An organic-based PCM (vaseline etc) was selected and compositionally mixed adjusting the operating temperature on the site.



Business Model



Market Size





7 AFFORDABLE AND
CLEAN ENERGY

| Impact Generated

EARTH

Saving
3.7 Mto/yr
of greenhouse
gas emission
compared to
regular grid
*2205 Unit/year

SOCIAL

Providing
1.000
new jobs to
Contribute
reducing climate
change by 2030

ECONOMIC

Reducing
14%
cost of
electricity (LCOE)
after 30 years of
usage

Milestone

1st Year

- Direct sales of cooling system reach 1,000 m²
- Get cooperation to 3 business partners

2nd Year

- Develop our own solar panel using our cooling system technology
- Get 1% market share in California by the end of the year

3rd Year

- Focus on expanding in B2C market
- Cooperation with 10 major solar panel in West Coast

4th Year

- Expand the market across the United States
- Launch brand new product innovation in renewable energy

5th Year

- Export the product and service globally
- Become market leader in the industry

Financial Projections

26%

Return On Investment

2026

Payback Period

28%

Annual Sales Growth

Team



Nailah Shabirah
SAS'25
Entrepreneurship



Josiah Enrico
SAS'25
Mechanical Engineering



Firdausa Amilia
SAS'25
Management



Fauzia Hafida
SAS'25
System Engineering



THANK YOU