

Day-1

→ Solar PV:

Chinese company - Longi modules

144 cells that are interconnected →

7" x 3.5" → 200 μm → 1 kg of Si 0.5 kW

Largest solar PV power plant in India

↓
Bhadra, Rajasthan → 2245 MW → 21.3% efficiency from solar to elec.
↓
10 ktone Si

World Projection (by 2025) → 1 TW

↓
4 mtone

→ wind farm: Typical tip speed → 235 km h^{-1}

→ Tesla model S: 100 kW → 600 km range

↓
loses power on charge and discharge

↓
Lasts for 2000 cycles

→ Toyota Mirai: EV based on fuel cell.

↓
114 kW → 550 km

(In India there are

(in India they say
600 km)

Working on low-cost non-precious
catalysts.

Claims 3 min to refuel. (fill the H_2 tank)

$H_2 \rightarrow$ from reproduction electrolyzer
[Fest GmbH] (30 kg??)

\rightarrow materials' properties:

• Optical: Transparent, translucent, opaque

Add Al_2O_3



3 different processes \rightarrow 3 different
properties.

