“High utilization of renewable energy is a vital component of our energy portfolio. "Full-Spectrum Optimized Conversion and Utilization of Sunlight", could pave the way for cost-competitive hybrid solar energy systems that combine the advantages of existing photovoltaic (PV) and concentrated solar power (CSP) technologies.”

- FOCUS Program
**PV/CSP Hybrid**

**What:**
PVMirror is a hybrid solar power plant technology combining the high efficiency of photovoltaics (PV) with the energy storage benefits of concentrating solar thermal power (CSP).

**How:**
A spectrum-splitting film directs the solar spectrum to the location of best use; NIR photons are converted to electricity by PV cells; VIS & IR photons are converted to heat at the receiver.

**Why:**
- 50% higher annual energy output than trough CSP; 15% higher output than PV
- 50% of the generated electricity can be stored and dispatched in the evening when demand is high
- 30% lower LCOE than trough CSP
- Diffuse light is collected by PV cells broader geographical use than CSP

Measured outdoor performance of a Prototype I PVMirror. 11% of the incident light is converted to electricity; 45% is converted to heat.