Building a sustainable solar supply chain

The current supply chain is failing us

- Solar manufacturing is over concentrated in China, with double the CO2 emissions and serious labor concerns
- Tariff wars and the Commerce Dept. investigation threaten supply
- The CBP WRO and the Uyghur Forced Labor Prevention Act will further constrain imports

A better solar supply chain is emerging

75GW
- low-carbon polysilicon production outside of China
- Wafers, cells, modules, inverters, racking, and trackers expanding in low-carbon economies
- Momentum is building towards a distributed, sustainable supply chain

Buyers can accelerate the development of a better supply chain through their purchasing power. Tools like ecolabels enable buyers to specify sustainable solar, sending a market signal that will motivate more rapid manufacturing expansion in the US, EU and elsewhere.

@ultralowcarbon  /ultra-low-carbon-solar-alliance
Global Electronics Council

Type I ecolabel
- Based on transparent life cycle criteria; developed by independent experts; regularly recertified.
- Verified by independent third parties; allows buyers to specify sustainable products.
- Simplifies sustainable purchasing.

Started as a nonprofit electronics certification program with EPEAT ecolabel in 2006.

Used in private and public sustainable purchasing in 43 countries ($2.2 billion in 2020 alone).

Participating manufacturers include Apple, Dell, HP, Google, Microsoft, First Solar, and more.

Type I ecolabel per ISO 14024.

1.5 billion sustainable products purchased through GEC ecolabels

220 million metric ton reduction in greenhouse gases

398 million energy savings in megawatt hours

EPEAT PV ecolabel

EPEAT is a multi-attribute standard that incorporates:
- sustainable use of energy, water and other resources,
- hazardous substances use
- corporate ESG performance.

Life-cycle based low carbon criteria reflecting emissions along the entire solar supply chain are being finalized for inclusion in the EPEAT PV ecolabel for fall 2022.

The EPEAT PV ecolabel can be used to simplify the specification of sustainably manufactured solar models.