**THE OPTIMAL PV MODULE SIZE**

**THIN FILM SCALES**
- Unit of process for CdTe is the glass; scaling benefit
- Unit of process for c-Si is the wafer; no scaling benefit
- Same manufacturing process as the previous technology
- Highest power utility-scale modules in the market

Thin film cost scales non-linearly...

![Thin film module comparison](image)

...similar to LCD screens.

No cost benefit from scaling c-Si

Crystalline Silicon Batch Technology: Unit of process is the Wafer

**FORM FACTOR IMPACTS**
- ~2.47m² module reduces variable BOS costs
- More Watts per install operation
- Site construction is faster; less modules to install
- Structural and labor components are reduced for $/W
- Module installs trials independently verified by 3rd party EPC

Larger module size equals lower variable BOS

![Module size comparison](image)

**WHY WE CHOSE 1.23M X 2M**
- ~2m module height is common, proven to work on any structure
- Module is optimized for a comfortable two person lift:
  - The larger the module, the lower the variable BOS cost.
- Structure design constraint is wind load, not module weight
- 1.23m width is independent of the loading profile

![Module size vs. BOS cost](image)

**STRINGS & HARNESSSES**
- Series 6 has a shorter string length (6 modules for 1500VDC)
- Harness lowers cost by:
  - Creating a sub-collection point
  - Effective increase of string length
- Structural / Site Flexibility
  - Harnesses can be designed optimally for site specific conditions. For example, a 7 string (in parallel) harness or a 5 string harness.
- Smaller electrical ‘pixel’ allows optimized structures
- Independently validated by Sgurr and Burns & McDonnell

![String harness comparison](image)