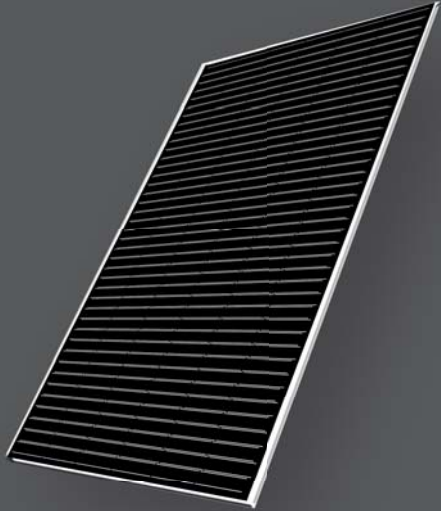
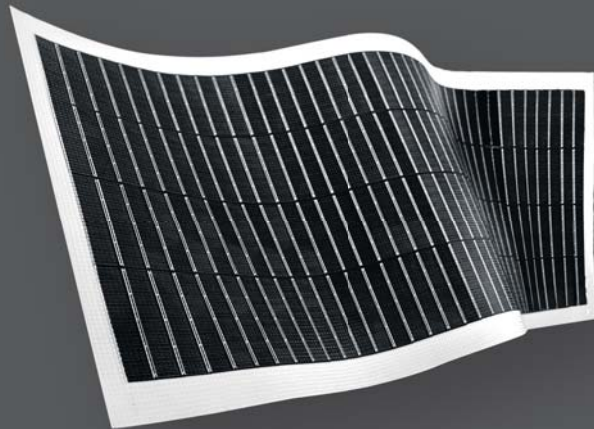


Product Innovation

Our rigid glass-glass modules are well suited for standard applications and for architectural integration.



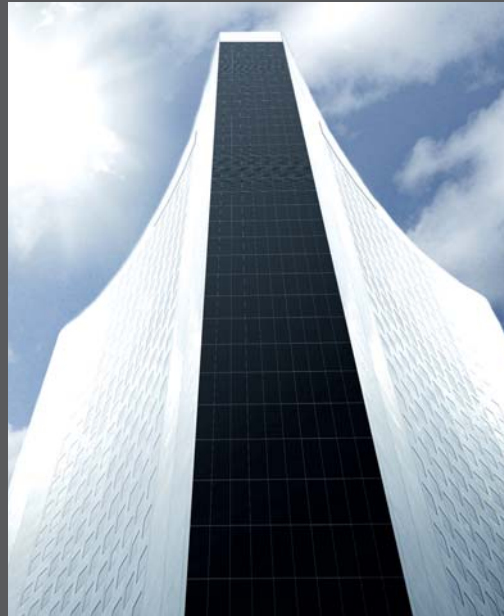
Solarion's flexible Modules are unbreakable, much thinner and more lightweight than conventional solar modules. An easy integration into roofing and other construction materials allows for low cost building installations.



Solarion develops and produces thin-film solar cells and modules employing a proprietary manufacturing process that deposits a thin layer of copper indium gallium selenide (CIGS) on the lightest substrate available at reduced deposition temperature.

The result is the world's lightest, thinnest and most flexible solar cell, well suited for a broad range of different applications:

- ✦ Rigid modules for ground installations
- ✦ Flexible modules for BIPV and BAPV
- ✦ Automotive industry
- ✦ Mobile consumer electronics
- ✦ Textile industry
- ✦ Aerospace



Solarion – Flexible CIGS on Polymer Substrate

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Technology-Leadership

Solarion AG strives for the technological leadership in the industrial mass-production of copper-indium-gallium-diselenide (CIGS) thin-film solar modules on flexible plastic substrate material.

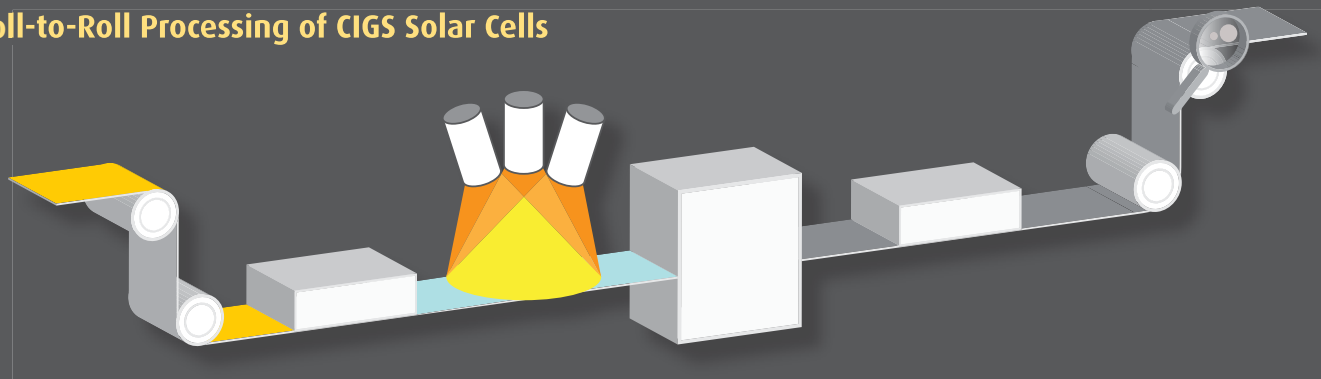
Clean Energy

Compared to conventional photovoltaics, the production innovations of Solarion are breakthroughs in the efficient usage of clean solar energy. Solarion's roll-to-roll production process is less capital intensive, requires less energy, minimizes material usage and is very efficient. This dramatically reduces the energy payback time of the photovoltaic system.

Cost Reduction

The production approach of Solarion has an outstanding cost reduction potential. With production on a large scale the photovoltaic energy conversion from sunlight into electricity will be significantly less expensive compared to today's solar cell standards.

Roll-to-Roll Processing of CIGS Solar Cells



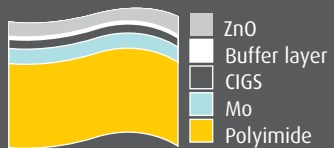
layer backside contact absorber layer buffer layer front side contact

process step (Mo) deposition (CIGS) ion beam supported low temperature deposition wet chemical deposition (ZnO) deposition

thin film solar cells

copper, indium, selenium in the compound CuInSe_2 or with gallium in the mixed phase Cu(In,Ga)Se_2

ultra light and super thin



ZnO
Buffer layer
CIGS
Mo
Polyimide

Solarion's patented Ion-Beam Assisted Deposition process (IBAD) allows:

- Better material properties & efficiencies
- Lower energy & material costs
- Precise process control
- Higher process speeds

