



**EUROPEAN ENERGY  
VENTURE FAIR 2007**

**O-Flexx  
Technologies GmbH**

European Energy Venture Fair  
September 17-18th 2007  
Zürich, Switzerland

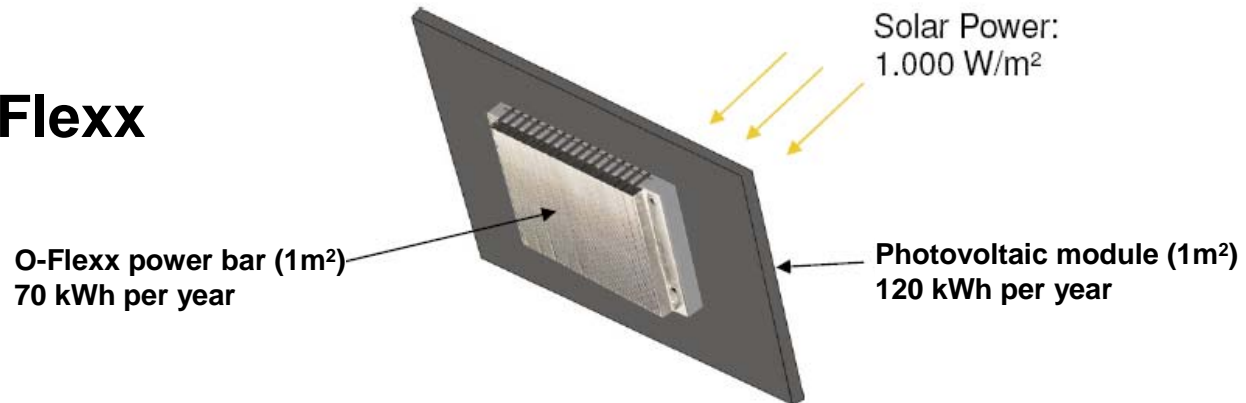
## Business Focus

**We boost energy efficiency and make use of waste heat**

- **O-Flexx develops components to boost energy efficiencies of energy generating equipment and to make use of low grade waste heat.**
- **We use proprietary, novel and cost effective thin-film thermoelectric elements.**
- **Thin-film thermoelectric elements are solid state semiconductor parts with no moving parts and high durability, similar to photovoltaic cells or modules.**

# O-Flexx Technologies - Technology and USP's

## Unique Selling Propositions for O-Flexx Products



### Example Power Bar for PV-Modules:

Payback period for combined PV/TE module shortens by at least 5 years



Transforming existing cost structures in energy management



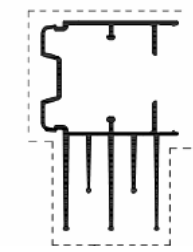
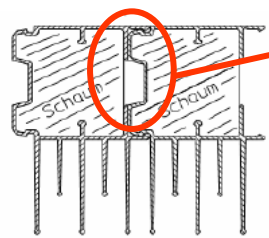
Accelerates market growth of solar energy and creates a high volume market for O-Flexx

- Easy to integrate add-on module for PV systems
- Low additional investment
- Breakthrough in total system efficiency

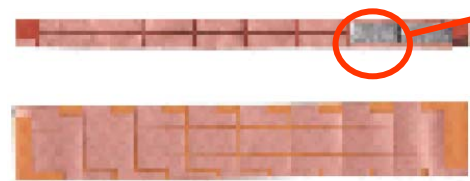
# O-Flexx Technologies – Technology and Product

Most key components of the power bar have been specified and developed in conjunction with excellent partners

*Aluminum profiles*

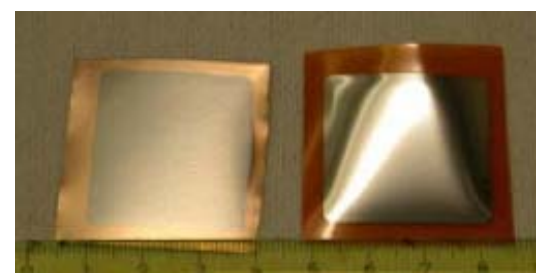


*Flexible power strap*



Freudenberg  
Mektec Europa

*Thin-film TE element*



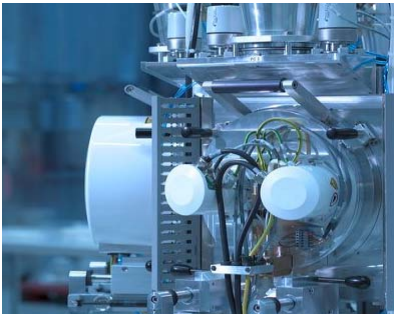
**œrlikon**



**Power bar**

# O-Flexx Technologies – Technology and Product

- Production set-up of key components developed with oerlikon
- Production of key components can happen in-house
- Assembly can be outsourced



**oerlikon**

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# O-Flexx Technologies - Applications

**Photovoltaic**



**Solar Thermal**



**Solar concentrators**



**Low grade waste heat**



## Market Size for Photovoltaic Modules

O-Flexx Power Bar in photovoltaic market already offers chance for substantial growth:

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2015</b>
<b>New installed PV power [MW/year]:</b>	<b>2.386</b>	<b>3.004</b>	<b>3.536</b>	<b>6.852</b>
<b>New installed PV power [Mio. m<sup>2</sup>/year]:</b>	<b>15,91</b>	<b>20,03</b>	<b>23,57</b>	<b>45,68</b>
<b>O-Flexx Market Share:</b>	<b>1,4%</b>	<b>3,9%</b>	<b>6,9%</b>	<b>10,0%</b>
<b>Number of Power Bars in PV [1.000 Units/year]:</b>	<b>217</b>	<b>776</b>	<b>1.621</b>	<b>4.568</b>

## Management Team

- **Ralph Teunissen (Chief Executive Officer), Co-Founder**



Ralph is a former board member of technotrans AG, where he was responsible for worldwide Sales and Marketing activities with sales > \$130 mill. Ralph's track record includes large companies as well as start-up/early stage experiences in the fields of printing inks and polymer manufacturers, as well as CEO for arccure technologies from 2005, until spin-off of O-Flexx. Ralph is a graduate of Nijenrode Business School and The Graduate School of Management, Delft University respectively.

- **Michael Bisges (Chief Technology Officer), Co-Founder**



Michael has filed more than 60 patents based on his unique experience in the material processing and microstructuring field, having invented DVD fabrication technology now deployed at more than 30% of all replication lines worldwide. He founded arccure technologies and acted as Managing Director from 1998 to 2005. Michael is a graduate of RWTH Aachen in Mechanical Engineering.

# O-Flexx Technologies– Funding Requirements

**Manufacturing: starts in 2009**

**Funding requirements: 10 M. Euro needed by mid 2008**

**Usage: application engineering, finalising manufacturing concept and set-up, hiring of necessary staff (sales & marketing, technical support functions), field testing and product certification**

**Exit scenarios: IPO or trade sale**