From concept to factory:

The Flexcell story
History of VHF-Technologies starts March 1999

...2cm² cells

a promising technology at the laboratory stage...
Our garage: the basement of the Ecole d’ingénieur du Locle

30m long roll-to-roll deposition of a-Si:H
First sales still using the equipment from IMT at night
May 2001: first series connection with a recycled HP plotter found in the trash

World longest solar modules of 30cm x 30m
June 2003: launch of the 1st consumer product

Rollable and lightweight universal solar charger

- mobile phones
- PDA
- GPS
- lights

Plug corresponding to your electronic device (not included)
August 2003: 1\textsuperscript{st} shipments of solar chargers
September 2003: offices and back end production moves to Yverdon

Encapsulation (30cm x 60cm) and I-V test zone

X-Y plotter for the series connection process

But in the mean time the investors said: « good luck! »
April 2004: private mandates as survival strategy
June 2004: 1st corrugated PET module, US patent filed
July 2004: real test on solar charger with integrated Li-ion battery

Swiss TV in the rain forest (Bresil)
October 2004: first on-grid demo (100Wp) and new contract with investors…

…with PET solar modules
December 2004: Front end moves to Yverdon
… we finally leave our garage

Happy founder!
Early 2005: the team is reconstituted
September 2005: finalizing the series connection equipment
End 2005: real pilot production starts and first contact with Q-Cells AG

50 panels per day

2 x 120m (1kWp) roll per week
Charging your wireless electronics wherever you are! → GPS, Sat. & mobile phones, digital cameras…

And more:
✓ easy transportable
✓ Plug & play (universal cigarette lighter socket)
✓ shadow tolerant
✓ durable
✓ compact and lightweight
✓ -20°C to +60°C environment
✓ easy parallel connection (adding up power)
✓ 3 years power output warranty
Remote & Caravanning

For your 12 Volts system!
Just nail it on your roof top!

And more:
✓ lightweight
✓ easy to install
✓ Unbreakable
✓ 3 years power output warranty

Remote small Solar Home System
(Solar Home Systems)

Caravanning applications

Direct power, charge or trickle charge
12V batteries
Charging your marine 12V equipments!

And more:
✓ easy to install
✓ flexible
✓ waterproof connector
✓ shadow tolerant
✓ durable
✓ lightweight
✓ 3 years power output warranty
✓ tested under real sailing race conditions
Best sailors in the world use flexcell!

Pascal Bidégorry, Banque Populaire
Dominique Wavre, TemenosII
Bernard Stamm, Cheminée Poujoulat
Cécile Poujol, PACA ENTREPRENDRE
PV for OEM

- Media jacket, atelier2CE
- Emergency phones, SIEMA
- i-pod bag, Daochu
PV tent
PV awning

- Integrated connectors
- Grid injection
- Meteorological control
PV membrane
Energy yield on corrugated PV

Ice skating rink of Yverdon-les-Bains

- **Power:** 2.1 kW
- **Inverter:** SMA 1100LV
- **Set-up:** 29th May 2006
- **Orientation:** 28°W
- **Slope:** 39°

**Injected power:**
1135 kWh/kWp (1/07/06 - 30/06/07)

**Measured irradiation:**
1109 kWh/m² (1/05/06 - 30/04/07)
(average on 20 years: 1141 kWh/m²)

6% more energy produced compared to a crystalline system oriented full south.
Necessary ingredients to survive… and then succeed!

- Strong Team
- Competitive Technology
- Enough Money
- Growing Market
- Innovative Products

Ventureideas @ EPFL November 2nd 2007 ©flexcell 2007
Thank you for your attention