



# CRYSTALCLEAR

## Final Event

Sofitel Munich Bayerpost  
Munich, Germany  
26 May 2009

**Welcome on behalf of:**

**The CrystalClear project partners**

**The European Commission**

## ***Final Event – the program (1)***

- **What & who is CrystalClear?**
- **The importance of PV for Europe**  
dr. Andreas Piontek - CrystalClear EC Project Officer
- **A tour along the value chain of wafer-based Si PV: results from the project**  
CrystalClear Subproject Leaders

***During lunch: Information market & posters***

## ***Final Event – the program (2)***

- **CrystalClear in perspective:**

- **An equipment builder's view on high-volume manufacturing**  
Dr. Peter Fath, Centrotherm Photovoltaics AG
- **Financing innovation and growth of the PV sector**  
Dr. Guido Agostinelli, Good Energies
- **Grid integration of gigawatts of photovoltaics**  
Dr. Martin Braun, ISET
- **Forum discussion: Si PV for grid parity and EU 2020 targets**

## *Final Event – the program (3)*

- **Lessons learned and conclusions**

Wim Sinke, Coordinator CrystalClear

- **Press briefing**

## *Who is CrystalClear?*

### **Industry**

- BP Solar (ES)
- Deutsche Solar (DE)
- Deutsche Cell (DE)
- Isofotón (ES)
- Photowatt (FR)
- Renewable Energy Corporation (NO)
- REC Wafer Norway (NO)
- SCHOTT Solar (DE)
- SolarWorld Industries (DE)

### **Research institutes**

- ECN (NL)
- Fraunhofer ISE (DE)
- IMEC (BE)
- InESS-CNRS (FR)

### **Universities**

- Konstanz (DE)
- UPM-IES (ES)
- Utrecht (NL)

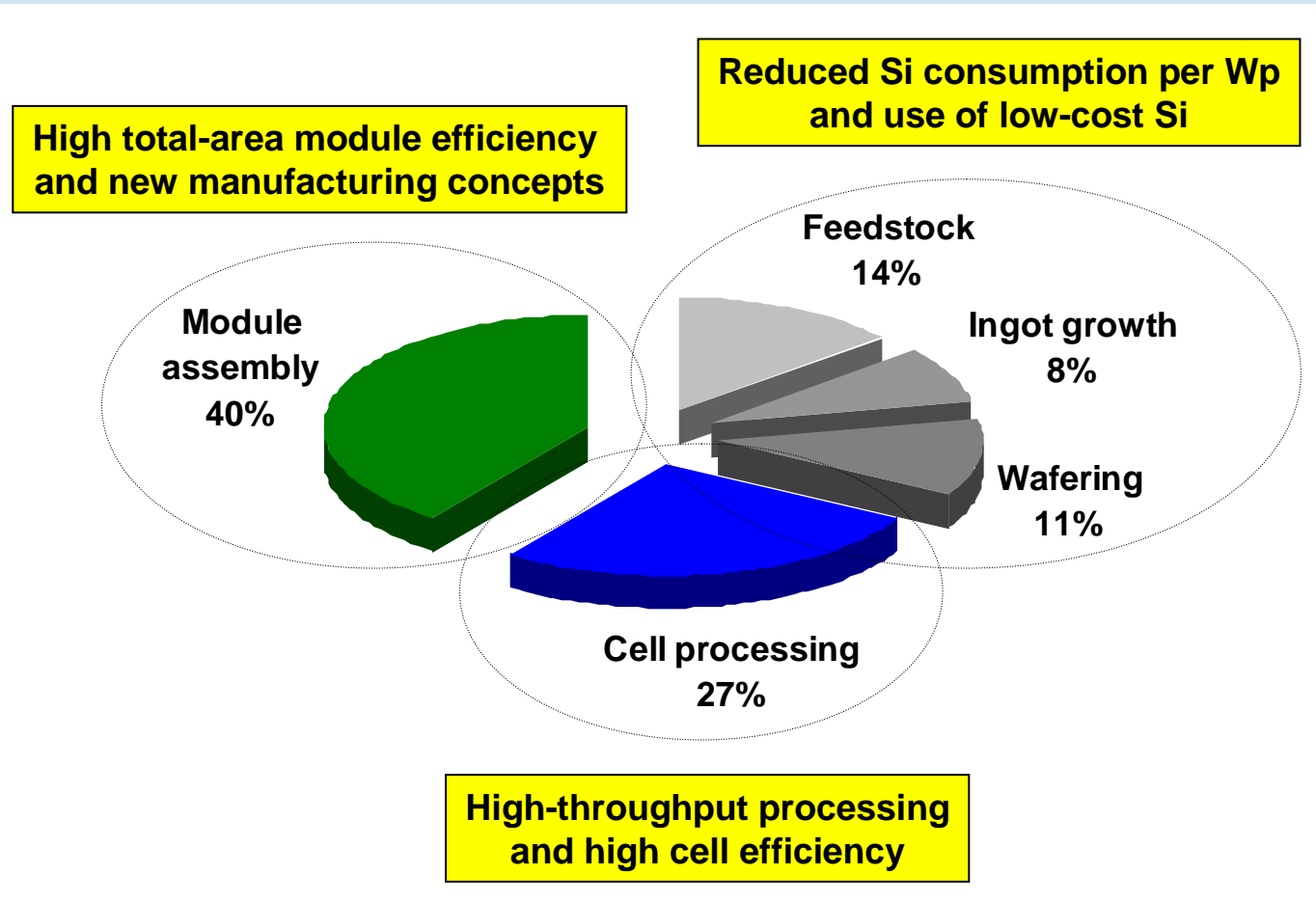
## *What is CrystalClear?*

### **CrystalClear main aims:**

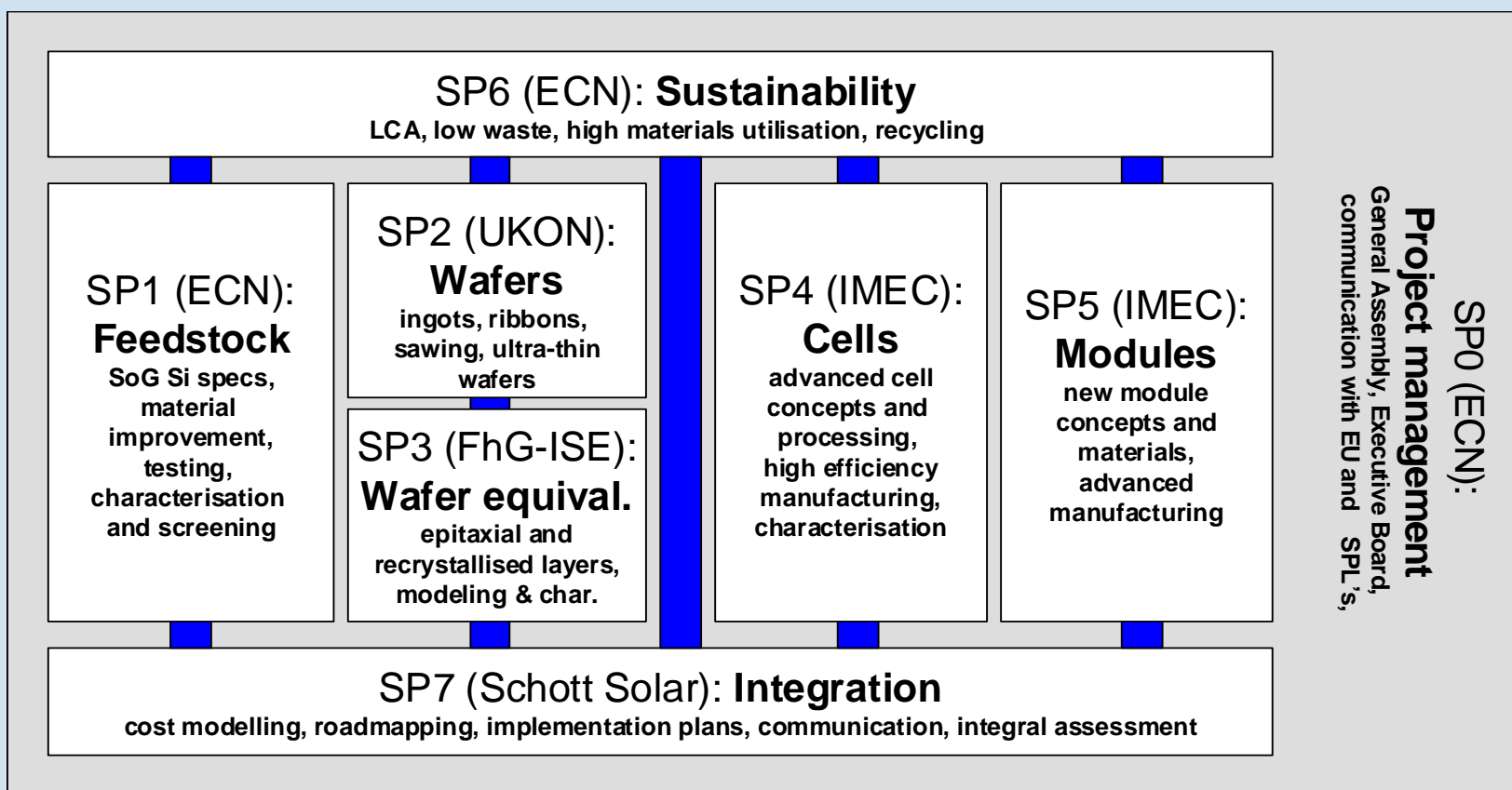
- **R & D & integration of innovative module manufacturing technologies for:**
  - direct manufacturing costs 1 € / Wp in next generation plants (the 2003 reference level was typically 2.5 € / Wp);
- **improvement of environmental profile:**
  - module energy pay-back time (EPBT) <2 years for Central Europe;
  - 20% per unit area for 3 most significant impact scores;
- **enhancement of applicability:**
  - flexibility / tailoring to customers' needs;
  - improving (maintaining) lifetime and reliability.

## What is CrystalClear?

### Relative cost structure of reference technology



## What is CrystalClear?



# CrystalClear: a success story?

**I wish you all an informative  
and pleasant day**