

# Energy Management

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The Chemical Company

# BASF's segment structure



**Chemicals**



**Plastics**



**Performance Products**



**Functional Solutions**



**Agricultural Solutions**



**Oil & Gas**

Inorganics

Performance Polymers

Acrylics & Dispersions

Catalysts

Crop Protection

Oil & Gas

Petro-chemicals

Poly-urethanes

Care Chemicals

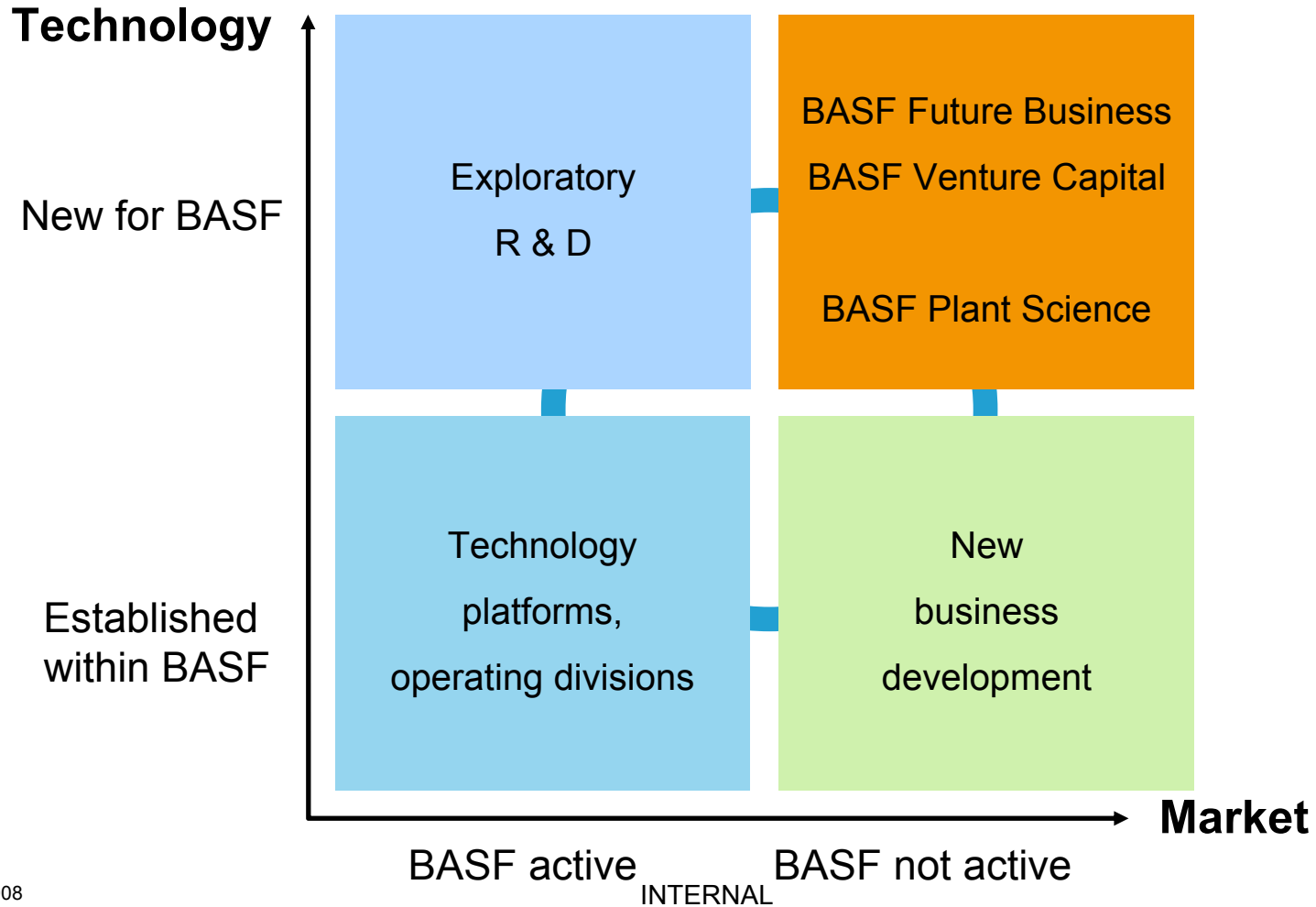
Construction Chemicals

Inter-mediate

Performance Chemicals

Coatings

# Innovation matrix of BASF



# Two companies - one goal

## Future business for BASF

### **BASF Future Business GmbH** Internal ventures

- Founded 1 April, 2001
- 100% subsidiary of BASF SE
- Headquarter in Ludwigshafen
- 23 employees\*
  - Ludwigshafen, Germany
  - Somerset, USA
  - Hong Kong, China

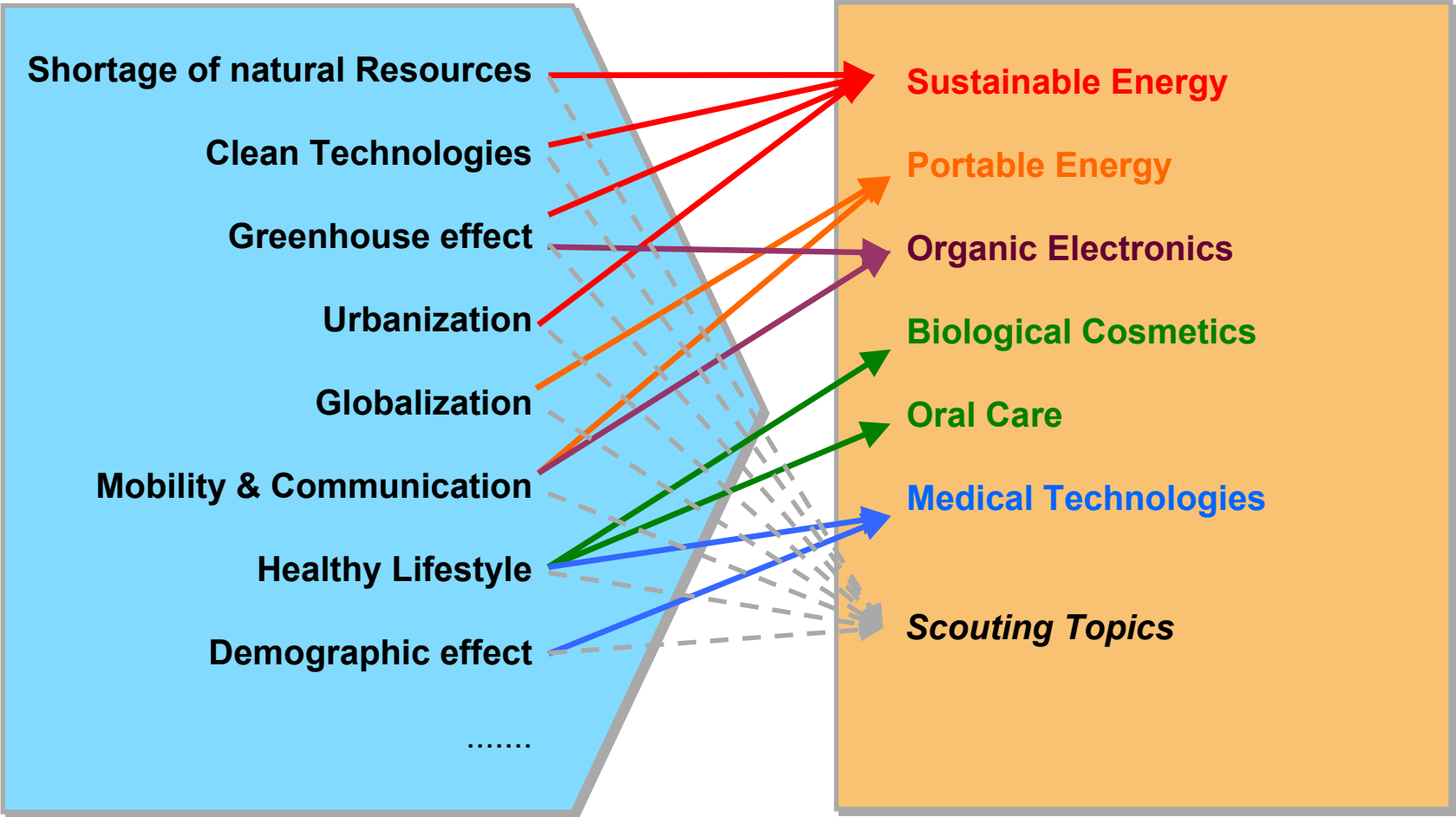
\*w/o BASF Fuel Cell GmbH

### **BASF Venture Capital GmbH** External ventures

- Founded 1 April, 2001
- 100% subsidiary of BFB
- Headquarter in Ludwigshafen
- 13 employees
  - Ludwigshafen, Germany
  - Fremont, USA
  - Hong Kong, China
- Vested with €125 million

# BASF Future Business GmbH

From trends to topics



# BASF Future Business GmbH

From topics to projects



**Sustainable Energy  
&  
Portable Energy**



- Fuel Cell
- Li-Batteries
- Thermoelectrics
- Magnetocalorics
- Ultra capacitors



**Organic Electronics**



- OLED Lighting
- Printed Electronics
- Organic Photovoltaics



**Biological Cosmetics  
&  
Oral Care**



- Pro-T-action™
- ClO<sub>2</sub> for Oral&Med Care

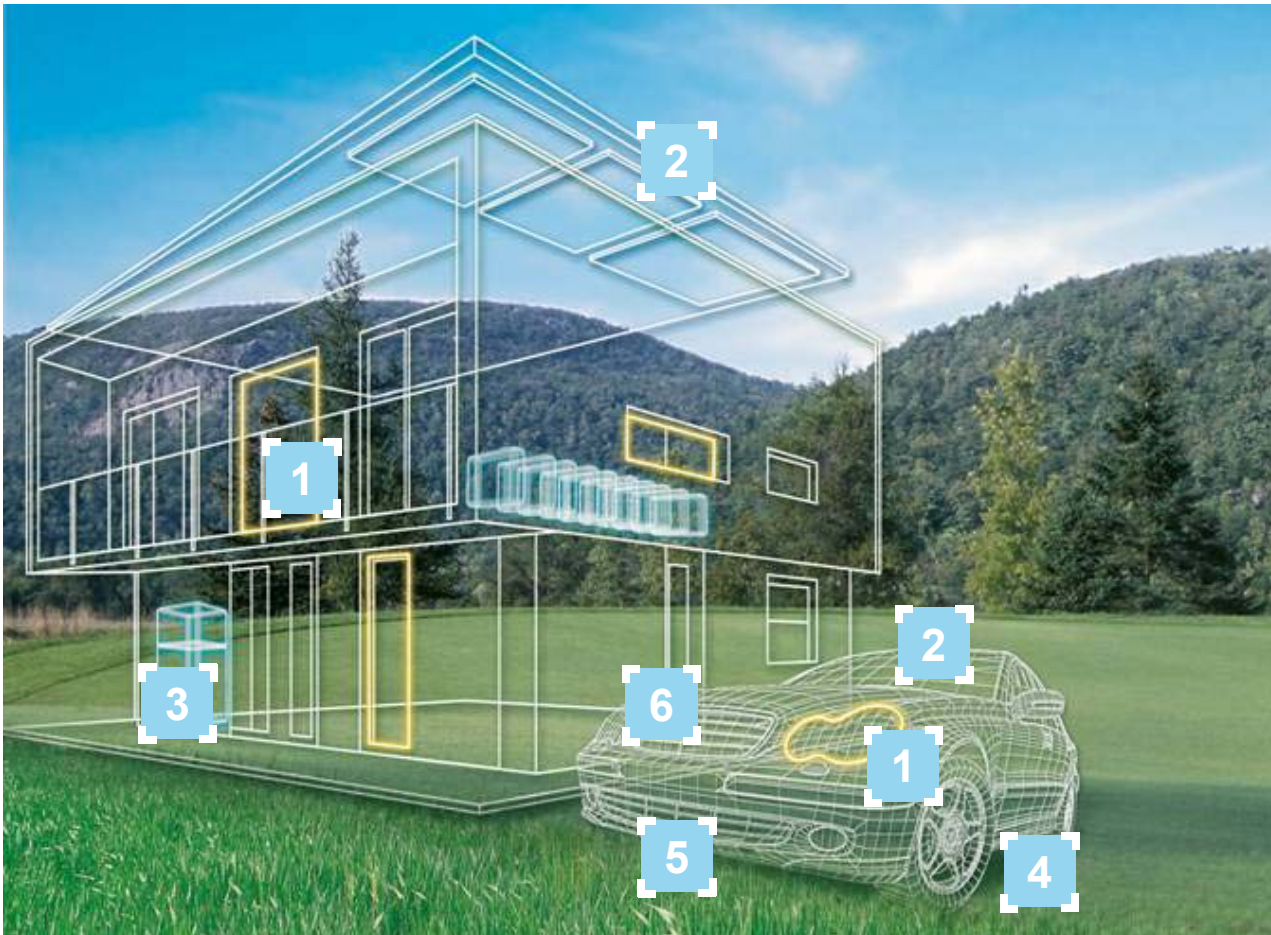


**Medical Technologies**



- Surface Modification
- Wound Management

# Energy Management Project Portfolio



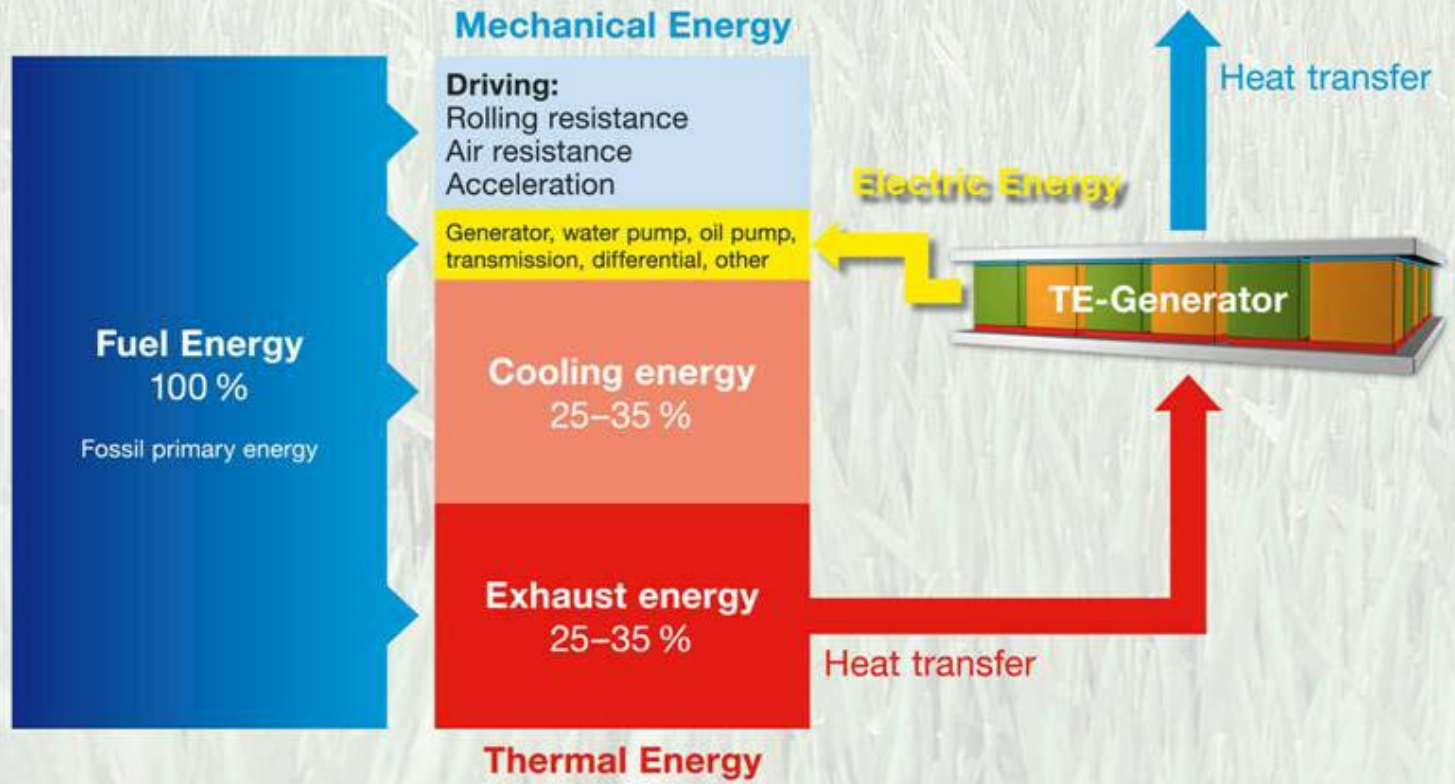
- 1 New Lighting Systems:**  
Organic Light Emitting Diodes
- 2 Energy by Sunlight:**  
Organic Photovoltaic
- 3 New Cooling Systems:**  
Magnetocaloric Cooling
- 4 Thermoelectric Power Generation**
- 5 Improved Batteries for Electro Cars:**  
Li-Ion Batteries
- 6 Ultracapacitors**

# Energy Management

## Application of Thermoelectrics

### Waste Heat Recovery in Cars

CO<sub>2</sub>-Reduction, Improved Fuel Efficiency







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