Science For A Better Life




Climate protection through intelligent building

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Bayer: Science For A Better Life

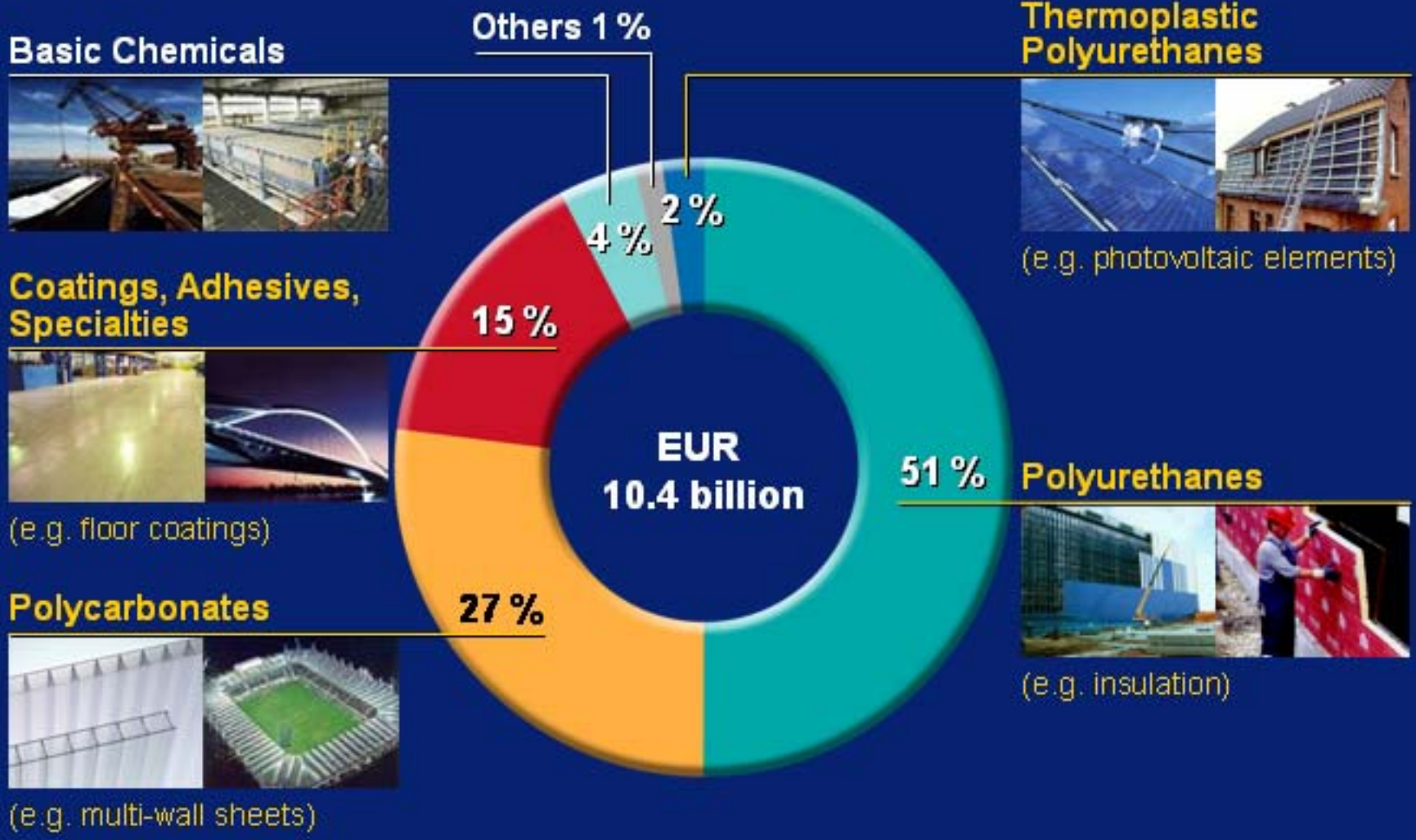
Spotlight on Bayer MaterialScience

Employees*	**15,400**
Sales** (2007)	**€10,435 million**
EBIT** (2007)	**€1,042 million**
R&D investments (2007)	**€209 million *****
New products in the past 5 years	**> 20 %**

* Converted to equivalent of full-time staff, as at December 31, 2007
** Continuing operations
*** Including R&D projects with customers

Bayer MaterialScience

High-tech materials and innovative system solutions



Bayer MaterialScience

2007 sales* by customer sector

Chemical industry
8 %

Automotive
18 %

Industries < 5 %
14 %

Electrical / Electronics
16 %

Other < 2 %
13 %

Furniture / Wood
17 %

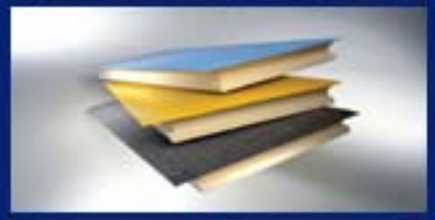
Construction
14 %

* Continuing operations

Bayer MaterialScience

Energy saving – Climate protection – Construction industry

- Employment of energy saving / CO_2-reduced production techniques to manufacture our raw materials
- Supplier of effective materials to enable reduced energy consumption in the construction aerea
- Bayer is part of the value chain the construction industry (occupant, operator, investor for a property)
- Focus of our activties in the construction aerea: Industry and production buildings, office buildings

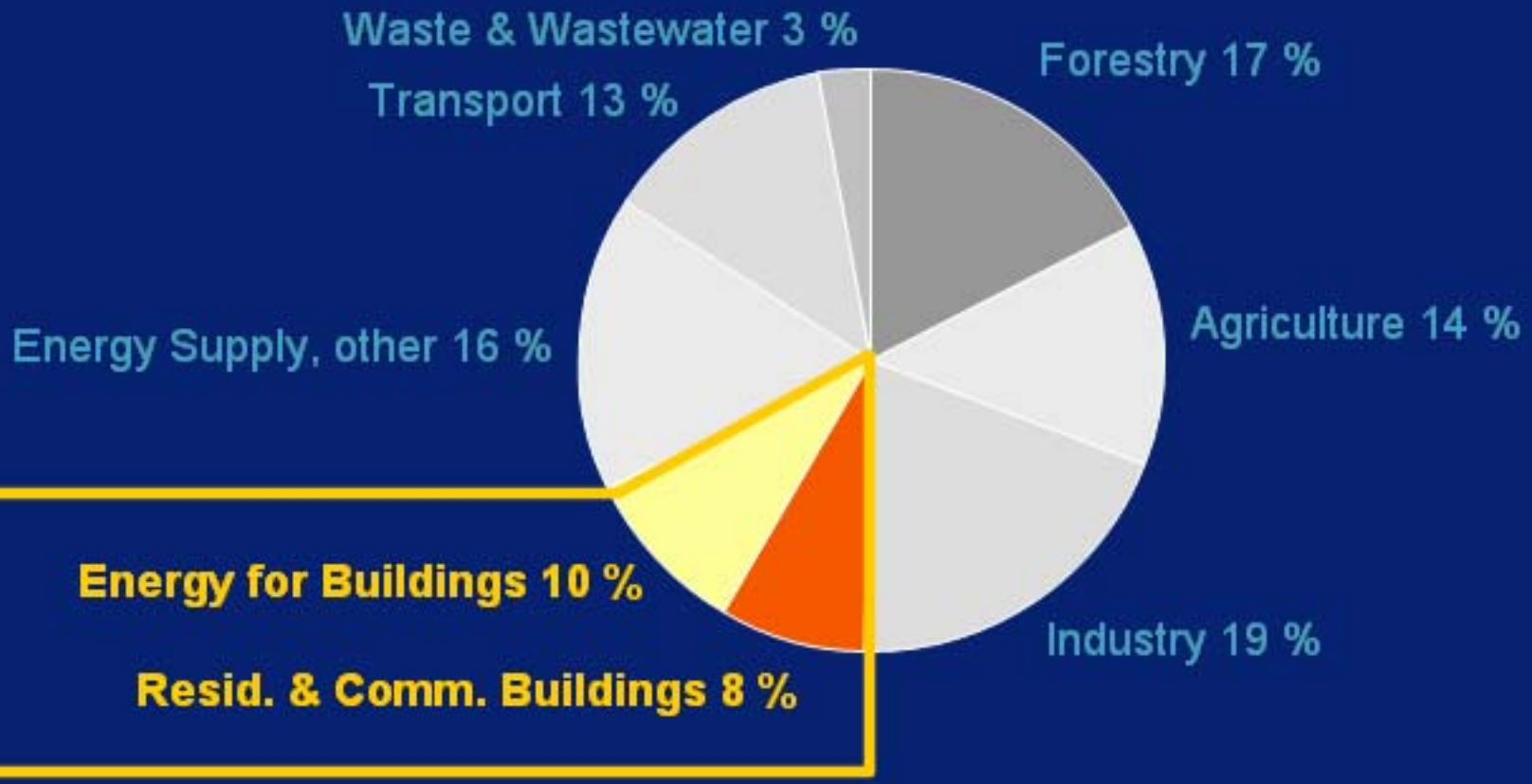


Bayer focus = not domestic buildings / "Commercial Building"

Potential for cutting CO_2 emissions

Energy efficiency of buildings

Global greenhouse gas emissions in 2004 – a total of 49 metric gigatons

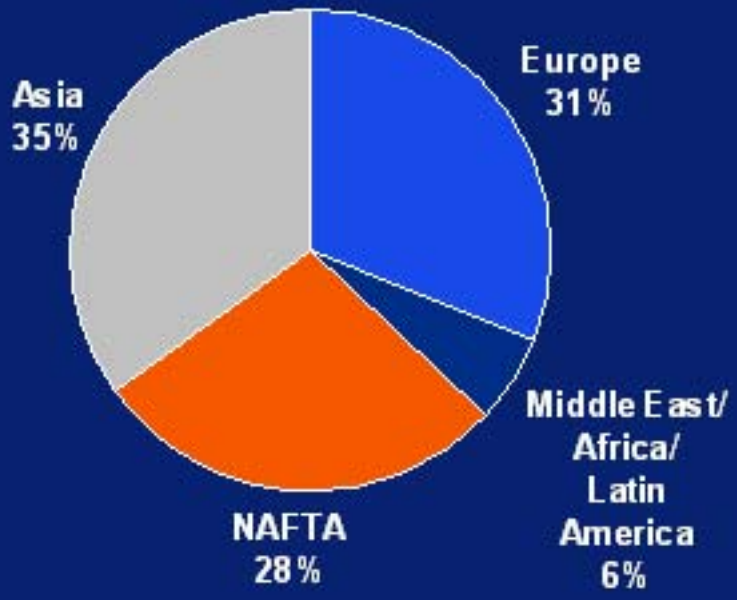


Source: IPCC, WG III contribution to 4th Assessment Report 2007
Basis Olivier et al., 2005, 2006

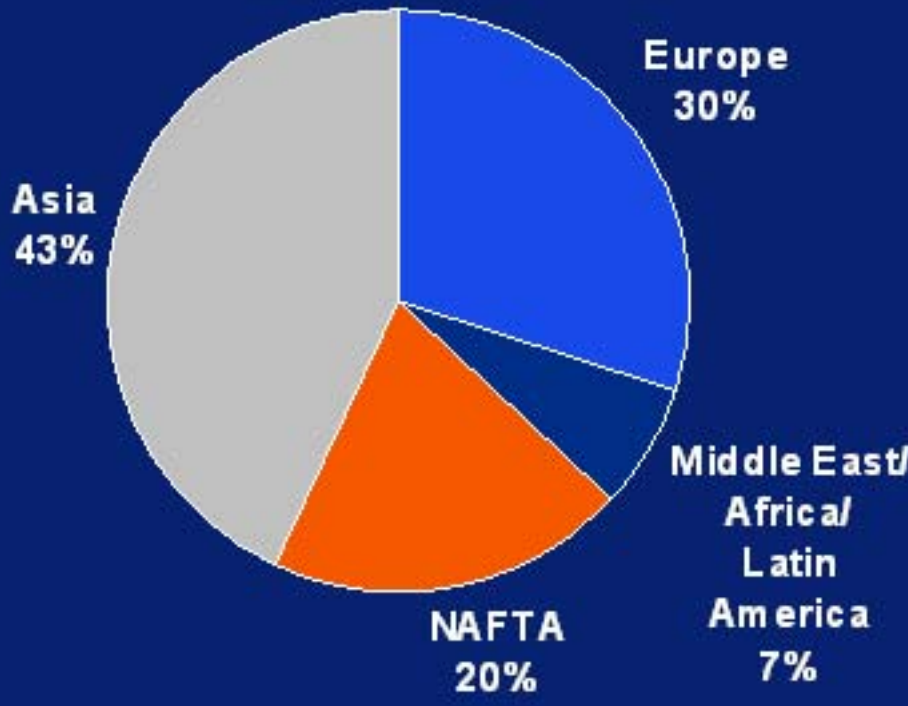
New building by region

Commercial + industrial + office buildings

2006
Total: Approx. €500 billion



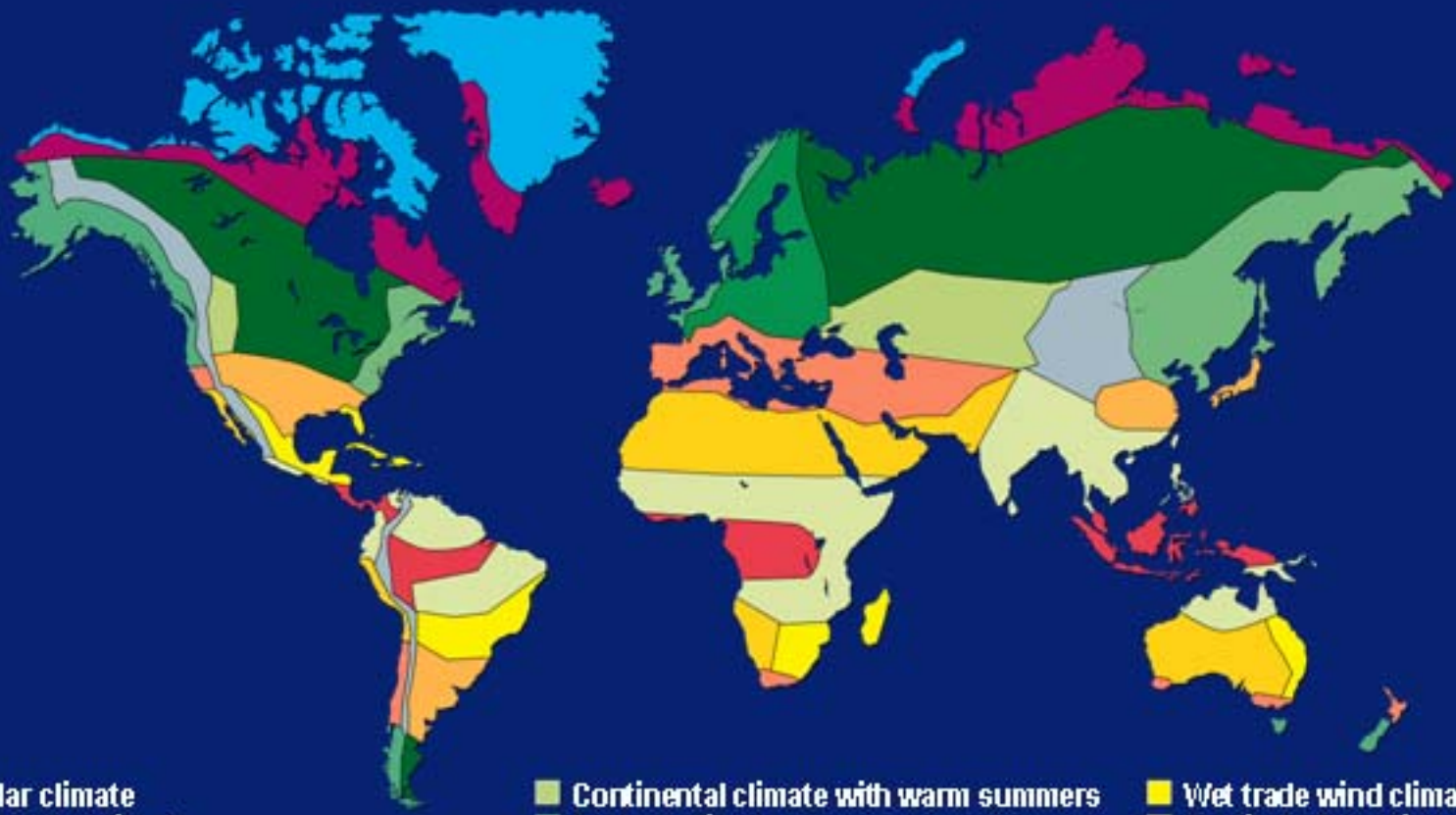
2015 (forecast)
Total: Approx. €800 billion



Sources:
Global Insight – Global Construction Outlook, BMS SPC-CI estimates

The Earth's climatic zones*

Global approach – A challenge



* Taken from E. Neef (simplified)

Climate-friendly building

In keeping with the location

Arctic

Mediterranean

Continental regions

Subtropics

Savannah

Desert

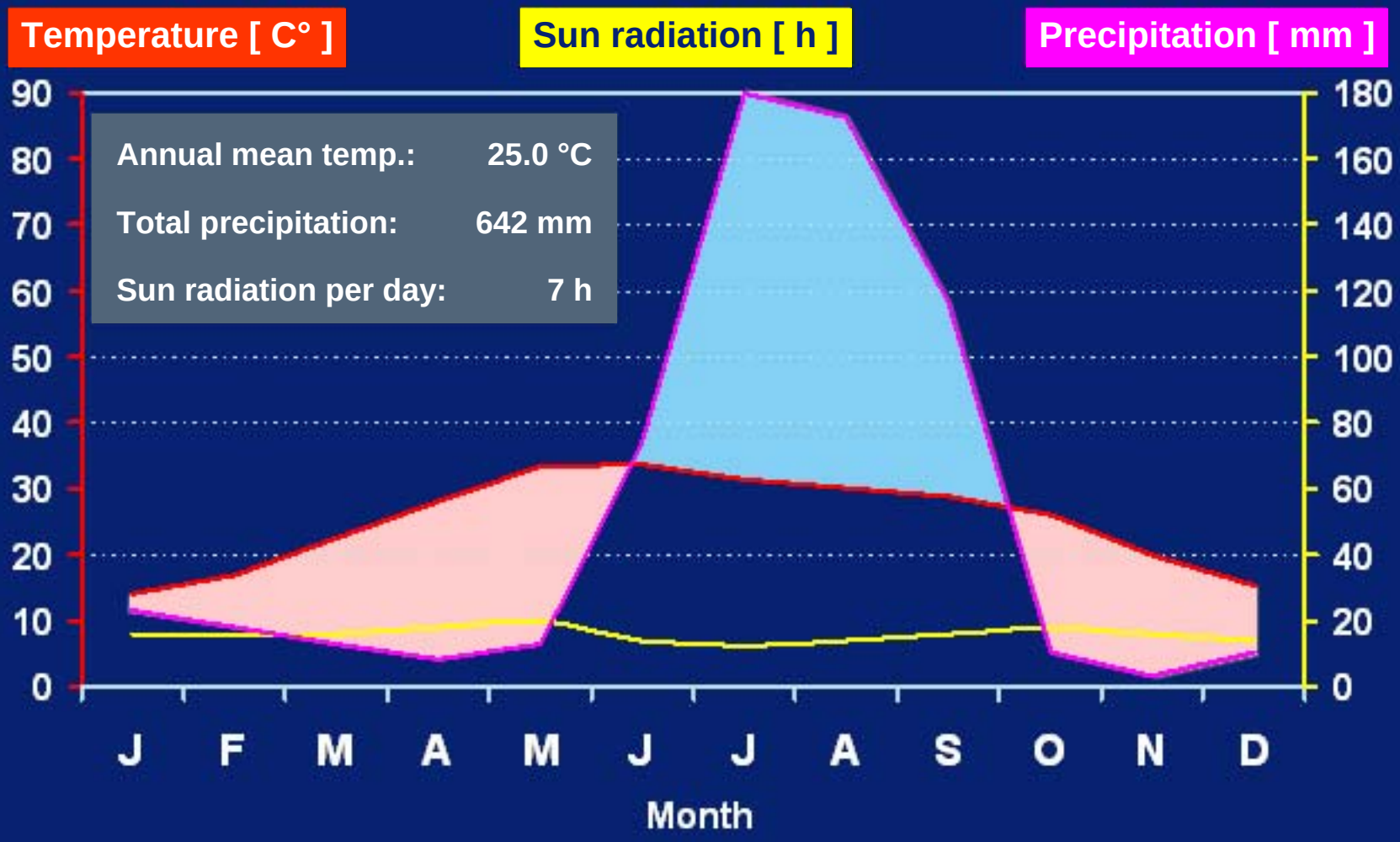
EcoCommercial Building India

Location Greater Noida

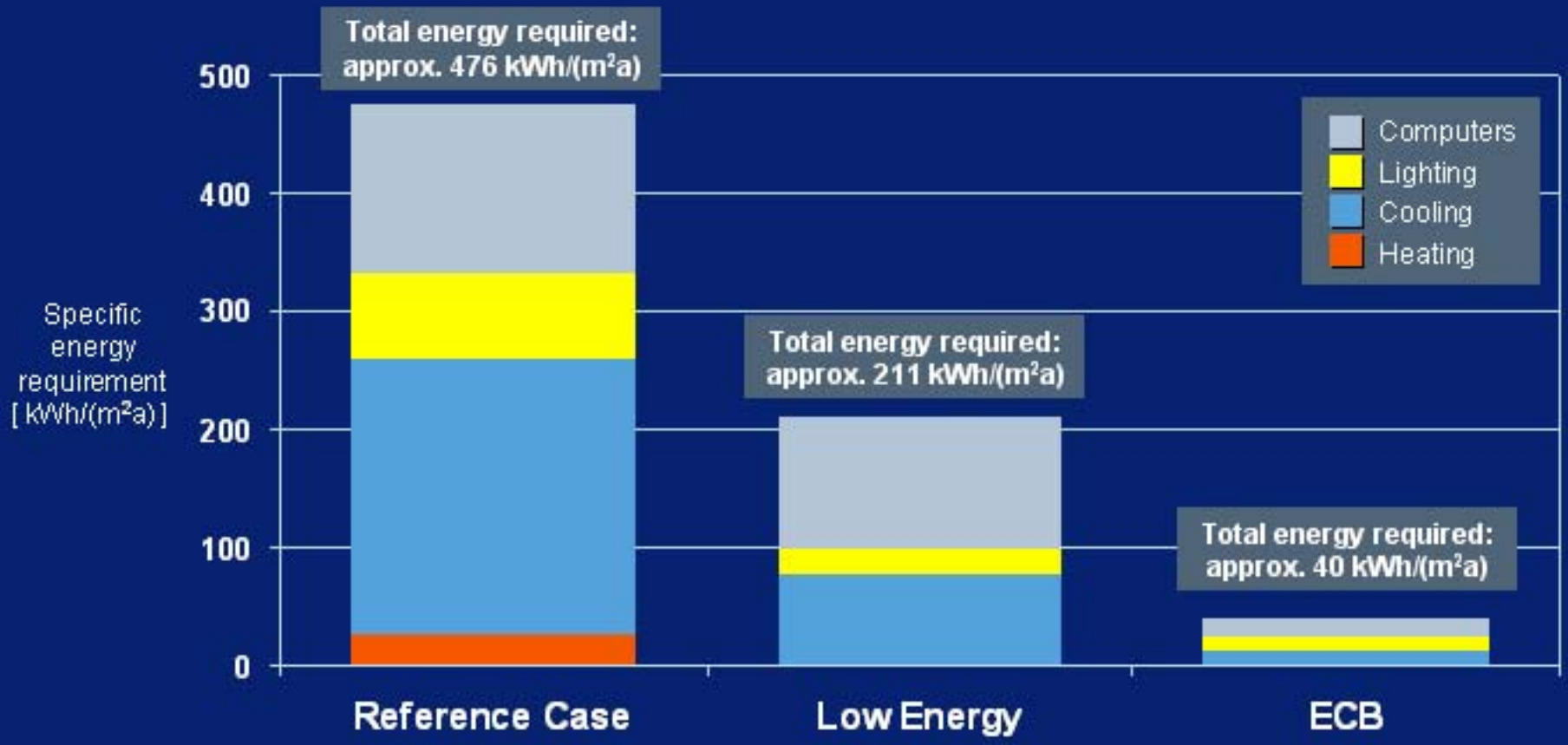

Monsoon season


Summertime

Local climate in New Delhi, India



Energy Consumption in the Simulated Building



Source: BUILDINGS AND CLIMATE CHANGE
Status, Challenges and Opportunities
United Nations Environment Programme, 2007

EcoCommercial Building in India

Project profile

Project goal

Zero-emission office building

Location

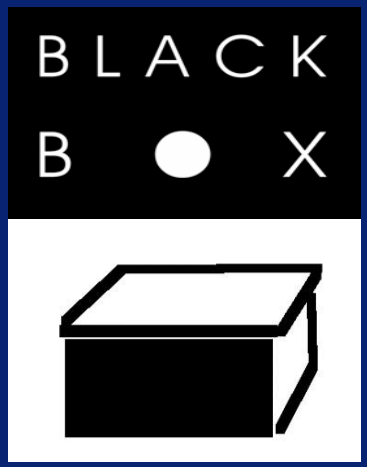
Greater Noida, India

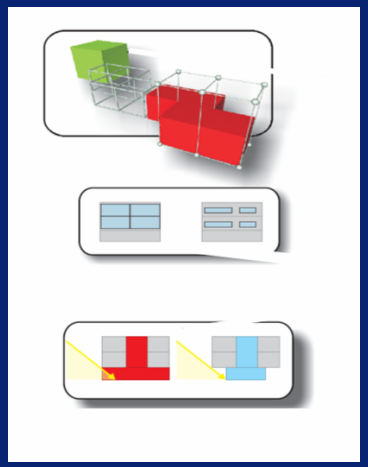
Planned use

- BMS Innovation Center with
- 50 office workplaces
- Canteen (capacity 25), kitchen
- 3 conference rooms, adjustable
- Room for product presentations
- Exhibition hall

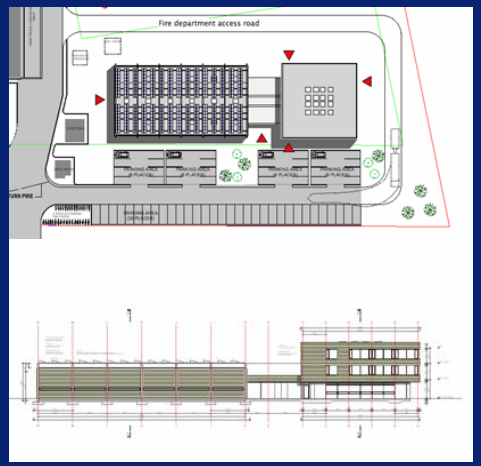
Modular building concept

- Climate-optimized for local conditions
- Passive and active measures for saving, supplying and storing energy





Dynamic building simulation – design



Project result – zero-emission office building incl. exhibition hall

EcoCommercial Building in India

Construction site

EcoCommercial Building in India

A look into the future

EcoCommercial Building in India

Summary – Unique features

- **Dynamic building simulation** with a view to optimizing the building envelope
- Energy supply with no emission of climate-damaging gases, **100 % regenerative**
- **Daylight-optimized** facade transparency (approx. 20–50 %)
- **Passive cooling concept** using the thermal inertia of the building's mass
- **Uninterrupted service** through decentralized buffer battery
- **24-hour off-grid operation**, independent of the mains supply

Bayer MaterialScience offers …

- … innovative materials and solutions
- … integration into an overall concept for climate-friendly building
- … solution for a global approach

ECB Projects

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Bayer MaterialScience

Forward-Looking Statements

This presentation contains forward-looking statements based on current assumptions and forecasts made by Bayer Group management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in our public reports filed with the Frankfurt Stock Exchange and with the U.S. Securities and Exchange Commission (including our Form 20-F). The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.