

Country Market Assessment China

A hand is holding a blue, octagonal object that resembles a solar cell or a circuit board. The object features a white map of China in the center, overlaid with a grid of white lines that look like circuit traces. The background is a dark blue with a bokeh effect of light spots.

**INTERNATIONAL WORKSHOP ON SOLAR
PHOTOVOLTAIC INVESTMENTS**

Marriott Hotel, Brussels - 13 & 14 February 2007

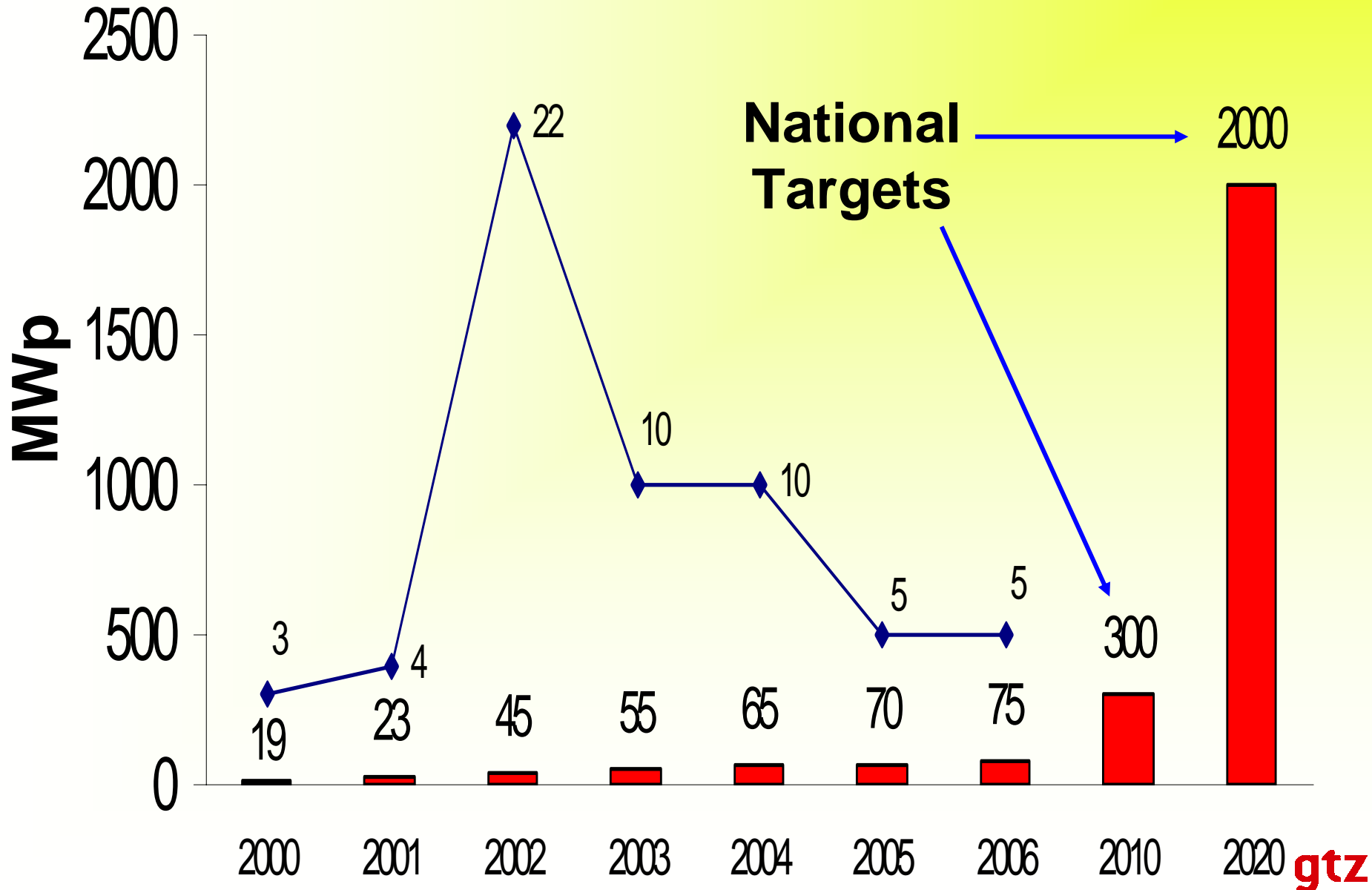
Frank Haugwitz / GTZ China

Key Power Sector Data 2004-2006

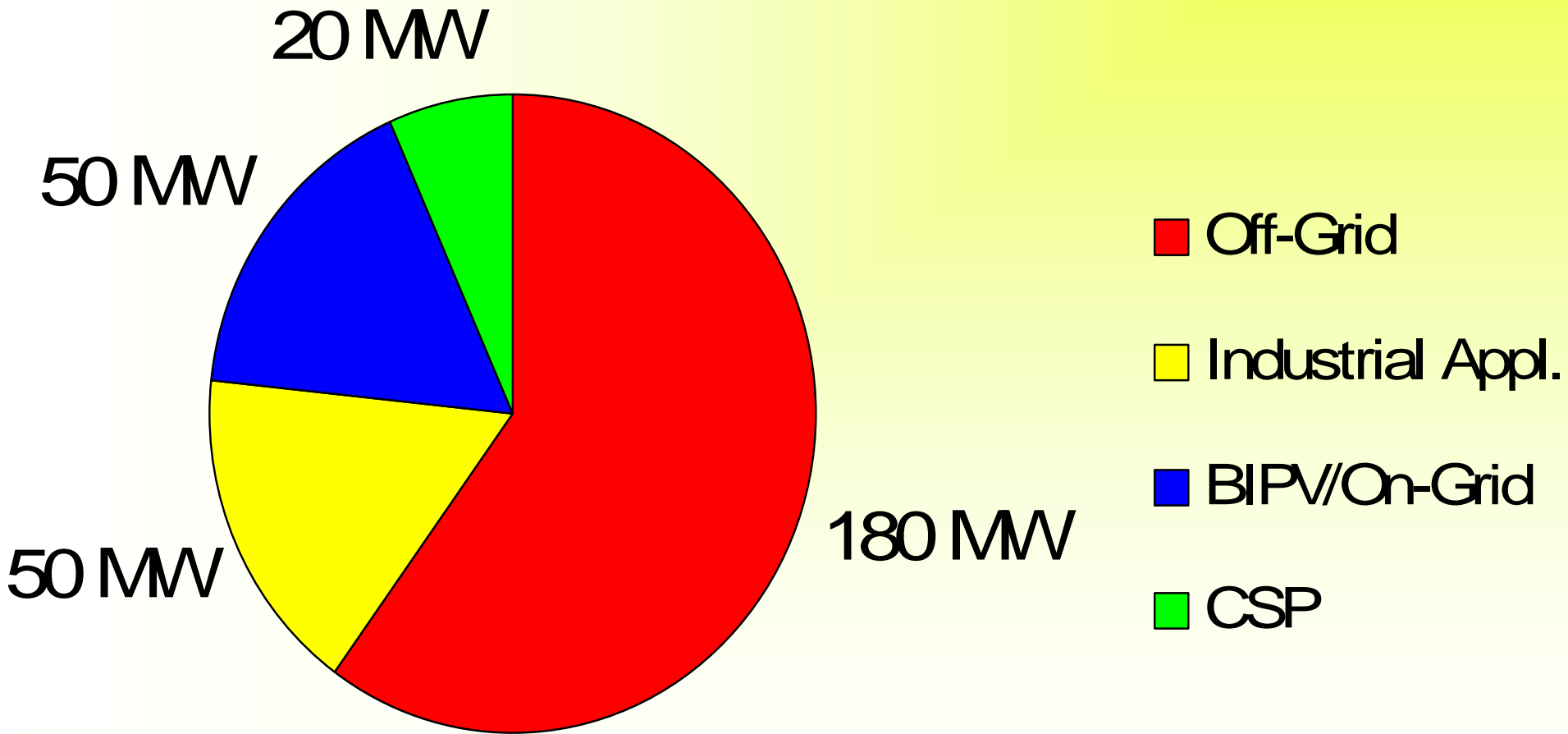
	2004	2005	2006	
Thermal	332	383	484	77,8%
Hydro	104	116	128	20,5%
Nuclear	6	7	7	1,1%
Renewables	1	2	3	0,5%
Total (GW)	442	508	622	100%

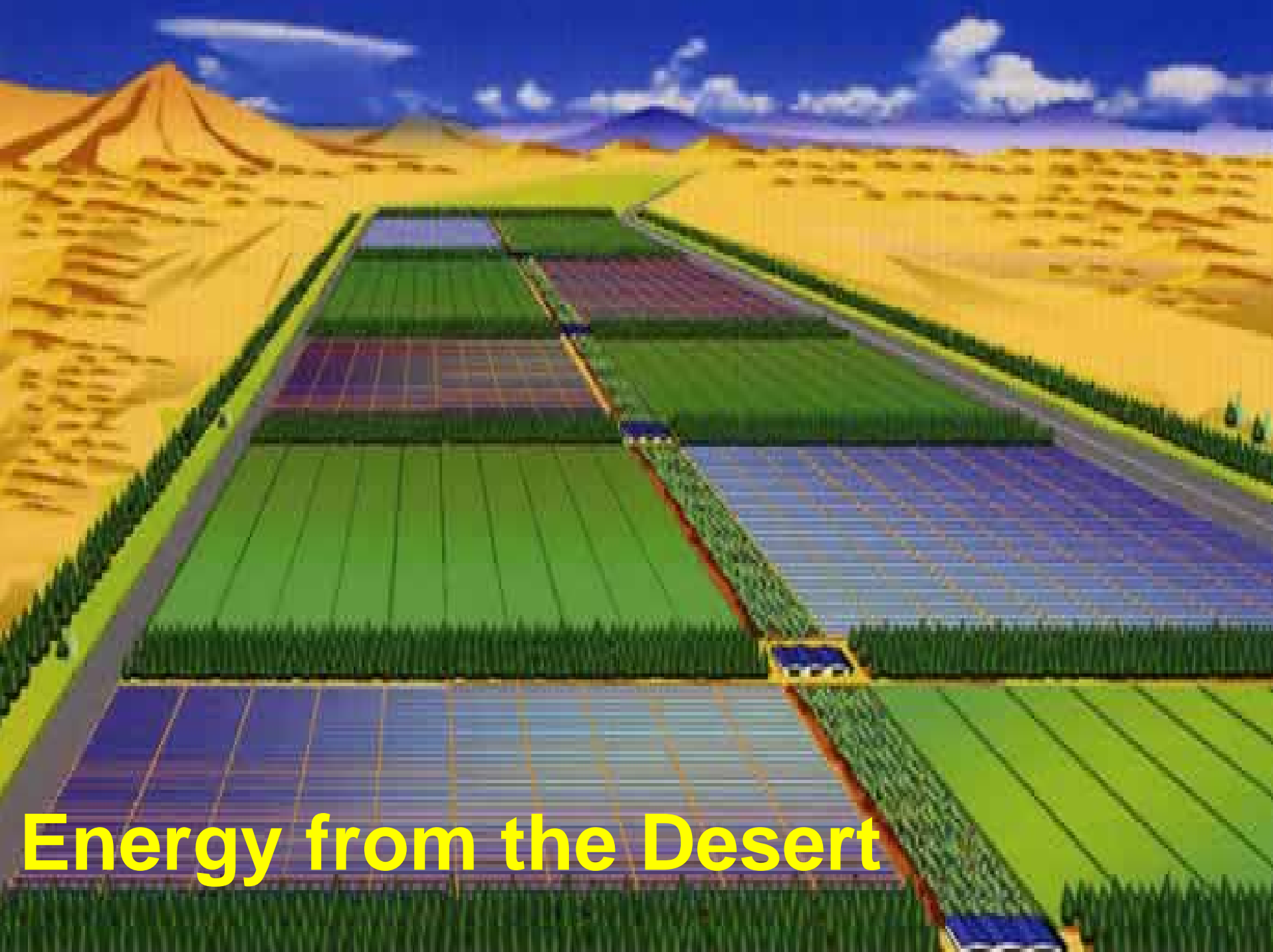
In 2006: Electricity Consumption: +14%
Coal Consumption: +8%
Oil Consumption: +14,5%
GDP Growth: +10,7%

Installed PV-Capacity 2000-2020



PV – Market by 2010 (Est.)





Energy from the Desert

Additional Future Drivers

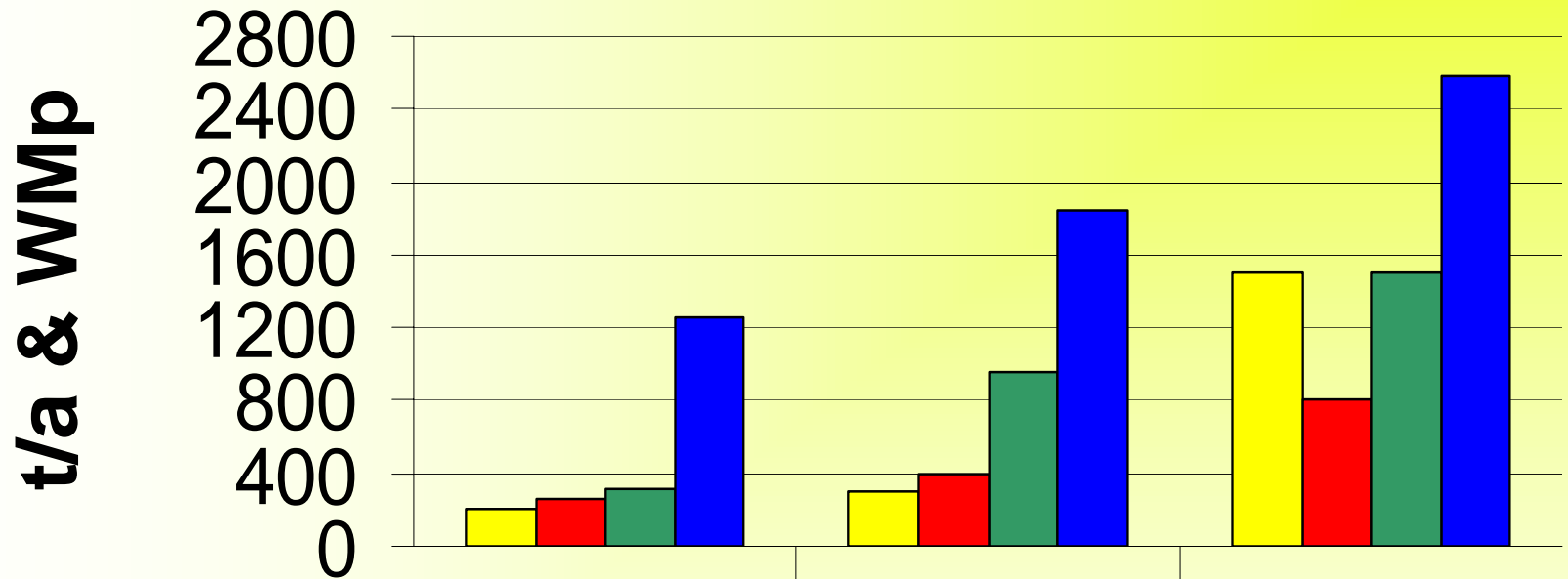
Legislative Framework Conditions





- January 2006 RE-Promotion Law came into effect
- State Council established RE Development Fund
- National Energy Law under preparation
- Long-term Scientific & Technological Dev. Plan

Regional Initiatives & Major Events

- By Law Shenzhen mandates SWH in 12Fl. Bldg.
- 2005-2015 Guangdong 100000 Roof-Program
- August 2008 Olympic Games - Beijing
- 2010 Expo - Shanghai

PV-Industry Development 2005-2007



 Silicon t/a	200	300	1500
 Wafer (MW)	260	400	800
 Cells (MW)	320	960	1500
 Modules (MW)	1250	1850	2580

Domestic Supply of Silicon

	2004	2005	2006 (Est.)
Demand	585	1596	3080
Supply	57.5	80	340
Shortage	527.5	1516	2740

Manufacturer	Capacity t/a	Invest. Mio. €	Schedule
Sichuan Emei	300	--	2006/8
Luoyang Zhonggui	300	--	2005/12
Luoyang Zhonggui	700 / 1260	-- / 140	2007/3 / 2008
Sichuan Xinguang	2000	110	2007/6
CSG Holding Co.	1500 / (5000?)	600 ?	2008/12 ?
Qujing Aixingui	3000 / (10000?)	250	2008 ?
Total	9160		

Strengths vs. Weaknesses

Unskilled labour 1 €/hrs	Limited skilled labour
Willingness to constantly improve production process	Lack of Quality Consciousness
Domestic production tech. could reduce costs	80% of all production technology imported
OEM Manufacturer Ambitions	Lack of Transparency Market Stakeholder
Income Tax Grace Period / VAT Refund	
Lower Costs for Construction, Lease Land and Electricity	

Resümee and Perspectives

- Targets, Programmes & Investments confirms the political commitment to promote the utilization of PV
- 2005: Industry Turnover 1,53 Bio. € before Tax / with share of Modules 870 Mio. € - by 2010 est. 1,5 - 2 Bio. €
- Present Focus on Rural Electrification will in the mid-term be replaced by grid-connected applications
- RE-Law (Feed-in-Tariff/Quotas) could trigger a greater domestic market demand
- Extreme growth of domestic industry lead to cut-throat competition – long term supply contracts signed
- Capacity Factor 30-40% - more IPO in the pipeline

Resümee and Perspectives

- Future domestic silicon supply could make them more independent
- Expansion plans of PV-Industry are based on strong export orientation - recent acquisition of MSK Japan
- Establishment of Regional Sales Offices e.g. EU/USA
- Concern that main export markets face saturation too soon and intl. M&A of foreign companies could become a problem for less intl. experienced Chinese companies



Thank you for your attention !

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