



International
Energy Agency

HELE Coal Technology Roadmap -- Process

Keith Burnard
Energy Technology Policy Division
International Energy Agency

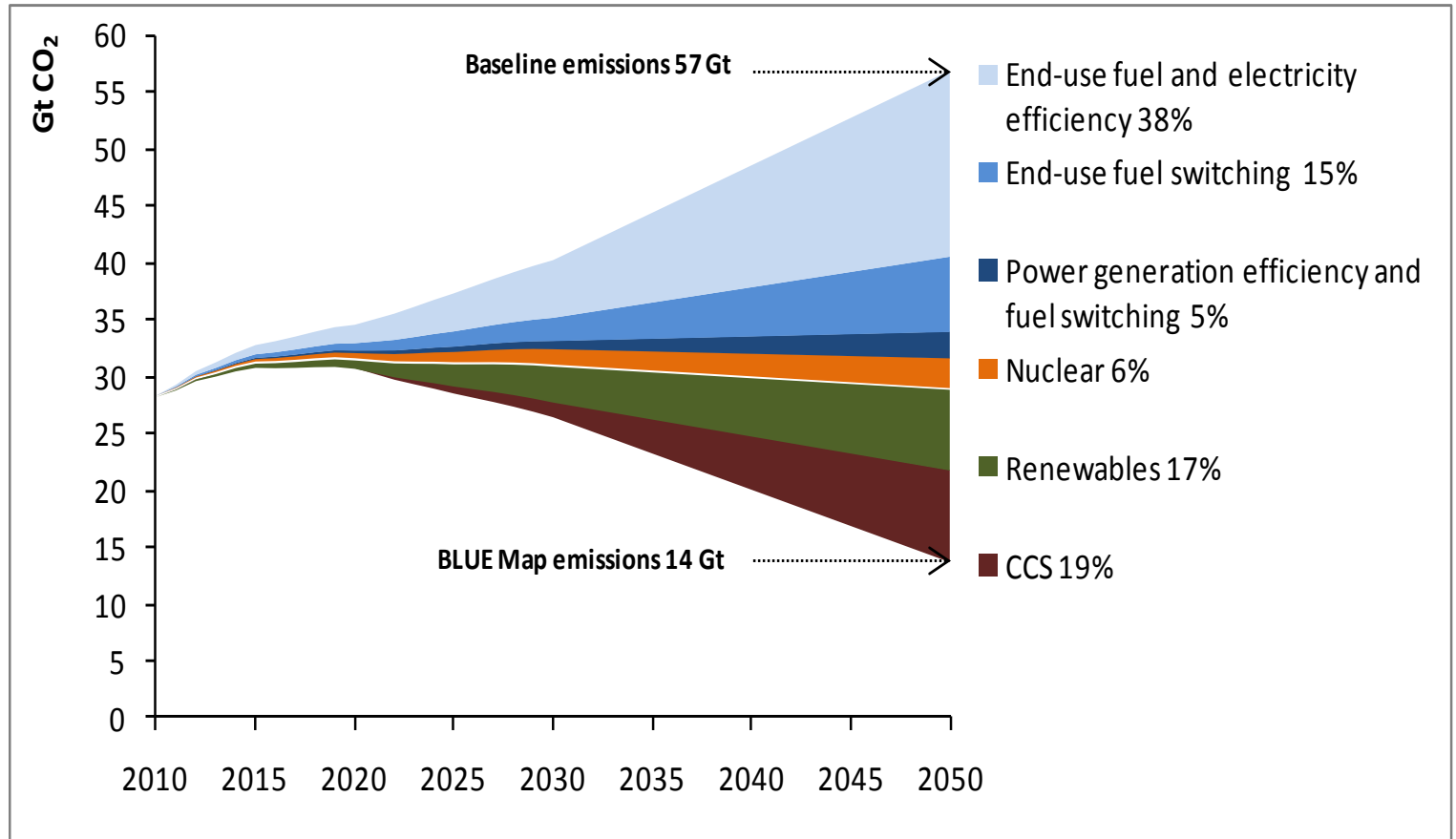
IEA, Paris, 8-9 June 2011

IEA Technology Roadmaps



To date: Biofuels; Buildings; CCS; CSP; Cement; E&PIH Vehicles; Nuclear; Smart Grids; SPP; Wind

Key technologies for reducing energy-related CO₂ emissions

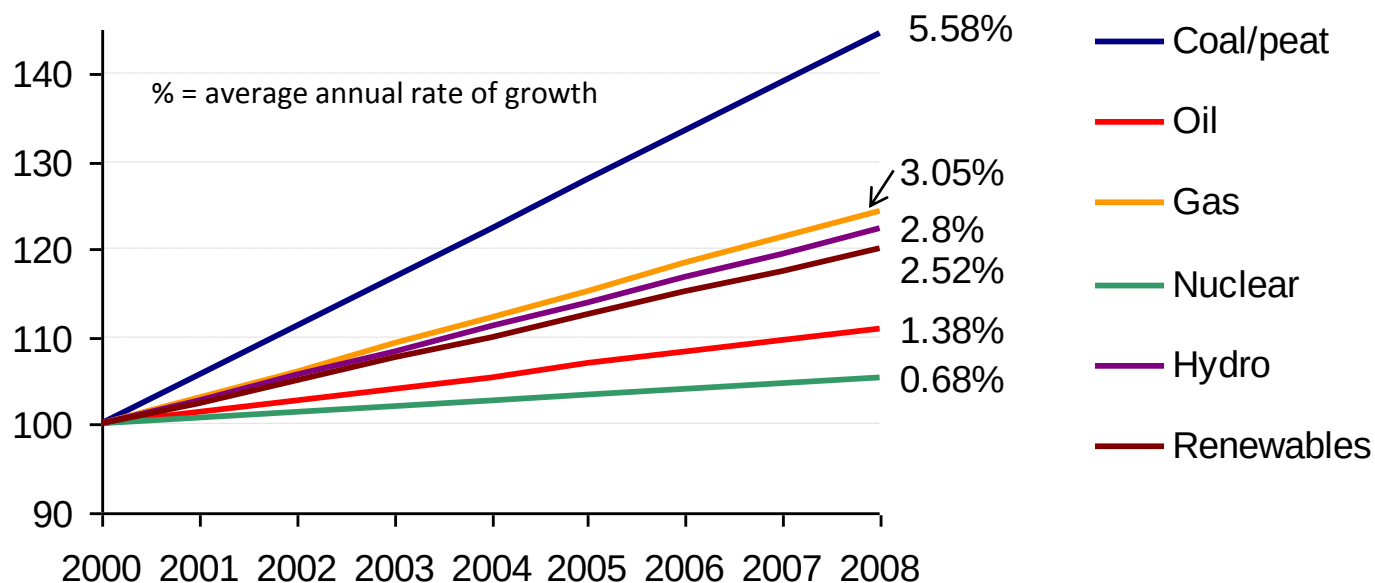


source: IEA Energy Technology Perspectives 2010

Analysis underpins development of technology roadmaps.

The role of coal in meeting recent growth in energy demand

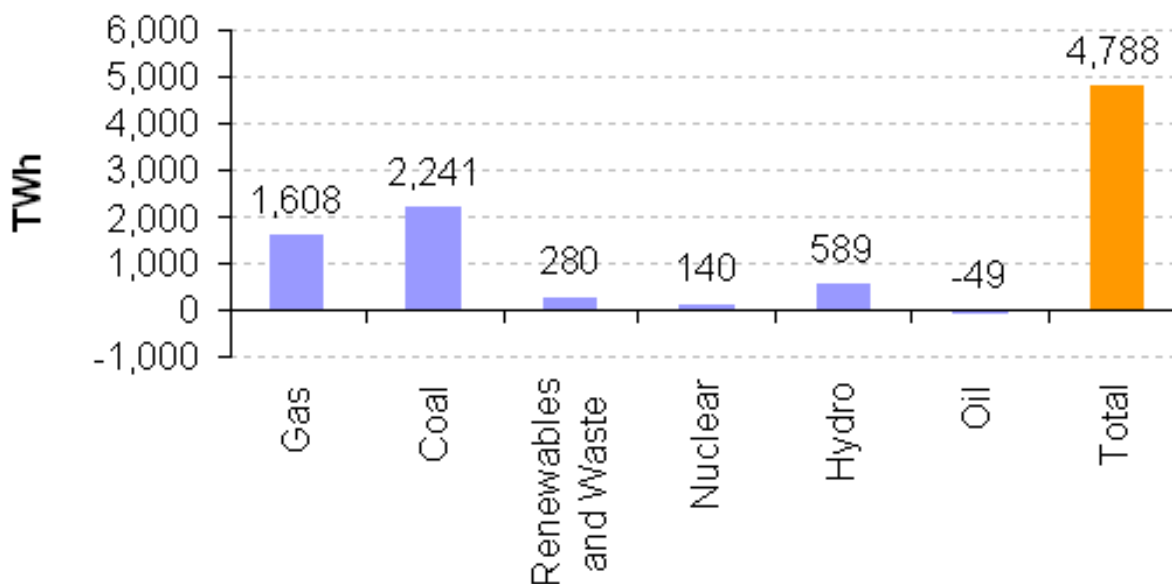
Increase in Primary Energy Demand, 2000-08



Demand for coal has been growing faster than any other energy source and is projected to account for more than a third of incremental global energy demand to 2030.

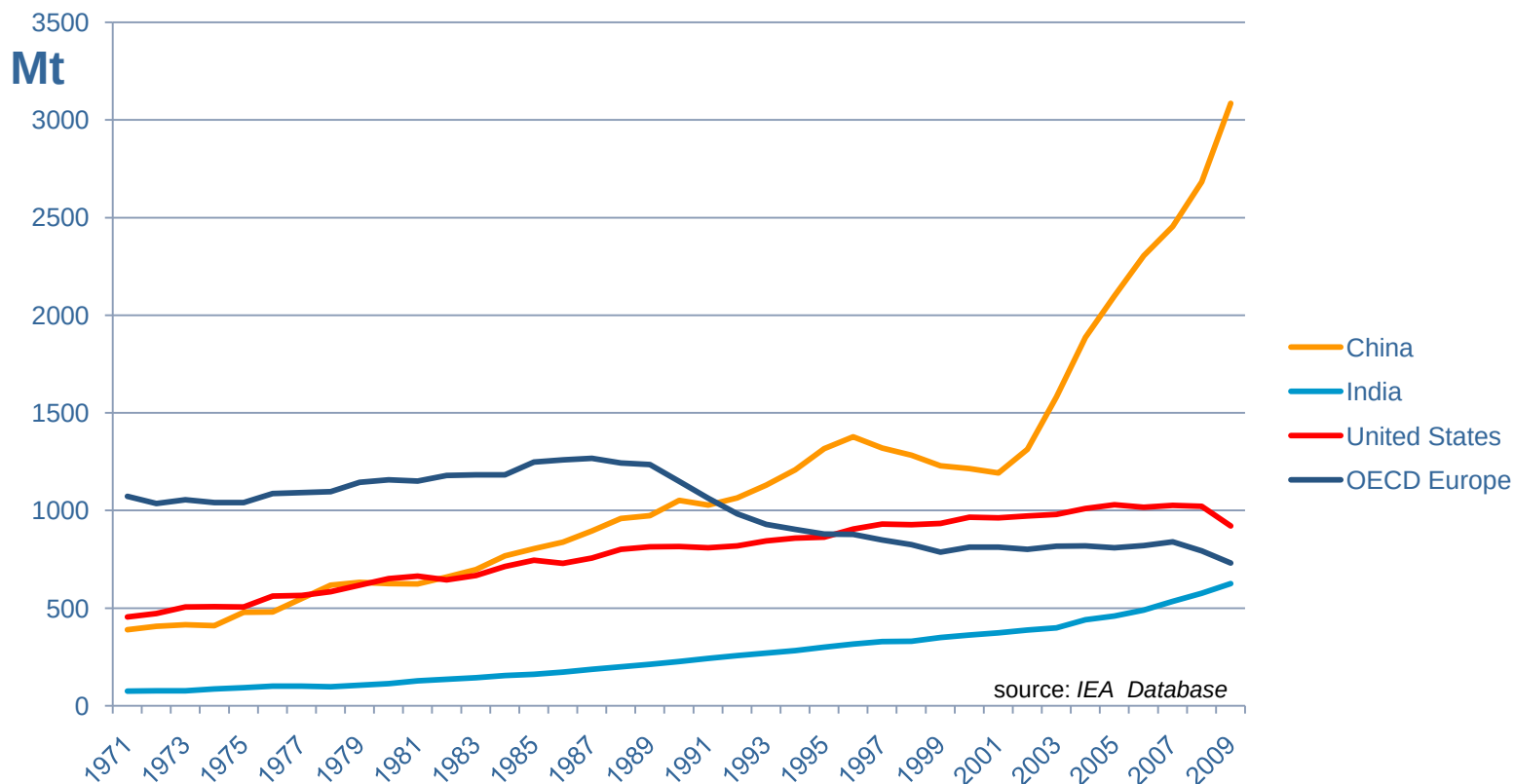
... and in meeting recent growth in electricity generation

World's Incremental Growth in Electricity Generation between 2000 and 2008



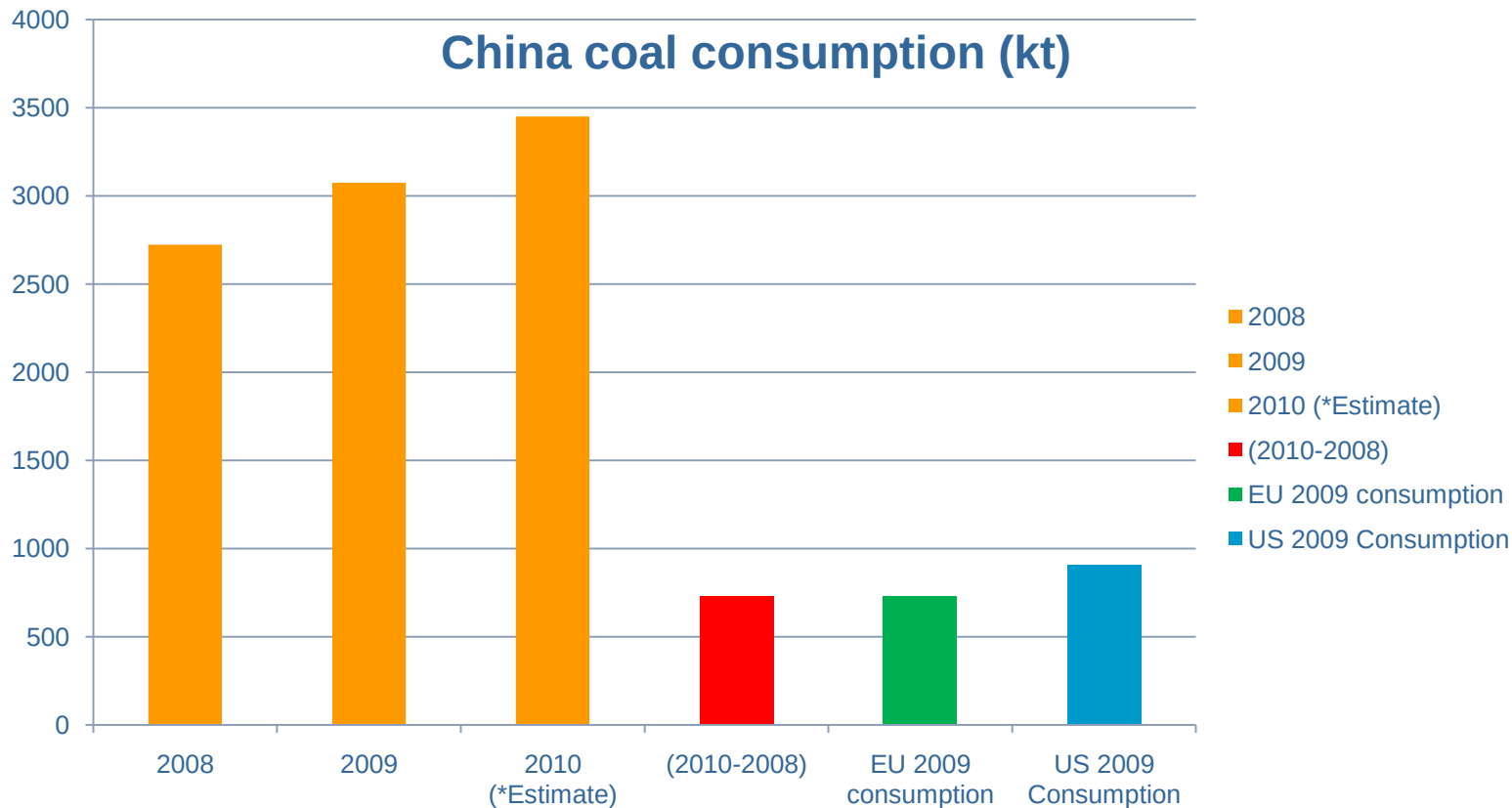
The growth in electricity from coal over the past decade represents almost half of total growth

Annual hard coal consumption



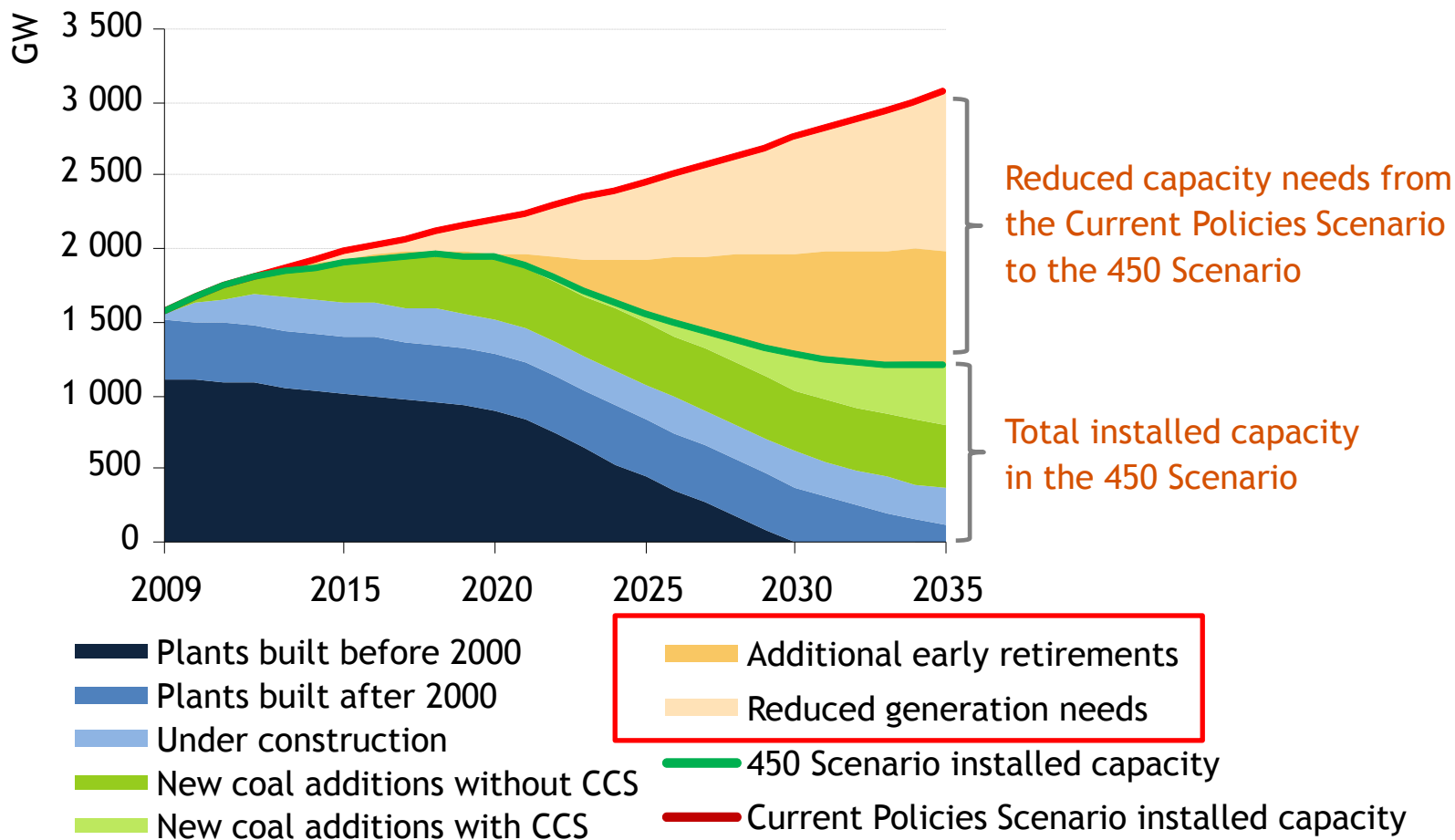
Coal demand growth comes from developing countries

Global coal trends



China's incremental demand of the last two years is equal to TOTAL EU coal use and not far off TOTAL US 2009 consumption

World installed coal-fired generation capacity in the 450 Scenario and the Current Policies Scenario



Peak coal capacity in the 450 scenario before 2020

HELE Coal Roadmap – content

- To identify milestones for the development of coal technologies for power generation to 2050;
- To cover technical, financial, policy and other matters important to generation of electricity from coal;
- To address regional implications of this development pathway, particularly for major coal-using countries.

Global leaders agreed a target of limiting temperature increase to 2°C at the UN climate change talks in Cancun in 2010

HELE Coal Roadmap – provisional timetable

Jun 2011	Workshop on the long-term vision for the deployment of clean coal
May – Sep 2011	Review of coal-fired power generation: technologies, policies, regulation, ...
Jun – Nov 2011	Regional workshops in US, China, India and Eastern Europe
Oct – Dec 2011	Drafting of roadmap
Dec – Feb 2012	Review of draft roadmap, editing and design
Jan 2012	Workshop to review conclusions
Mar 2012	Publication of roadmap

► Energy
Security

► Environmental
Protection

► Economic
Growth

► Engagement
Worldwide



► Energy
Security

► Environmental
Protection

► Economic
Growth

► Engagement
Worldwide

Thank you

keith.burnard@iea.org