



Bridging the gap towards a sustainable energy future

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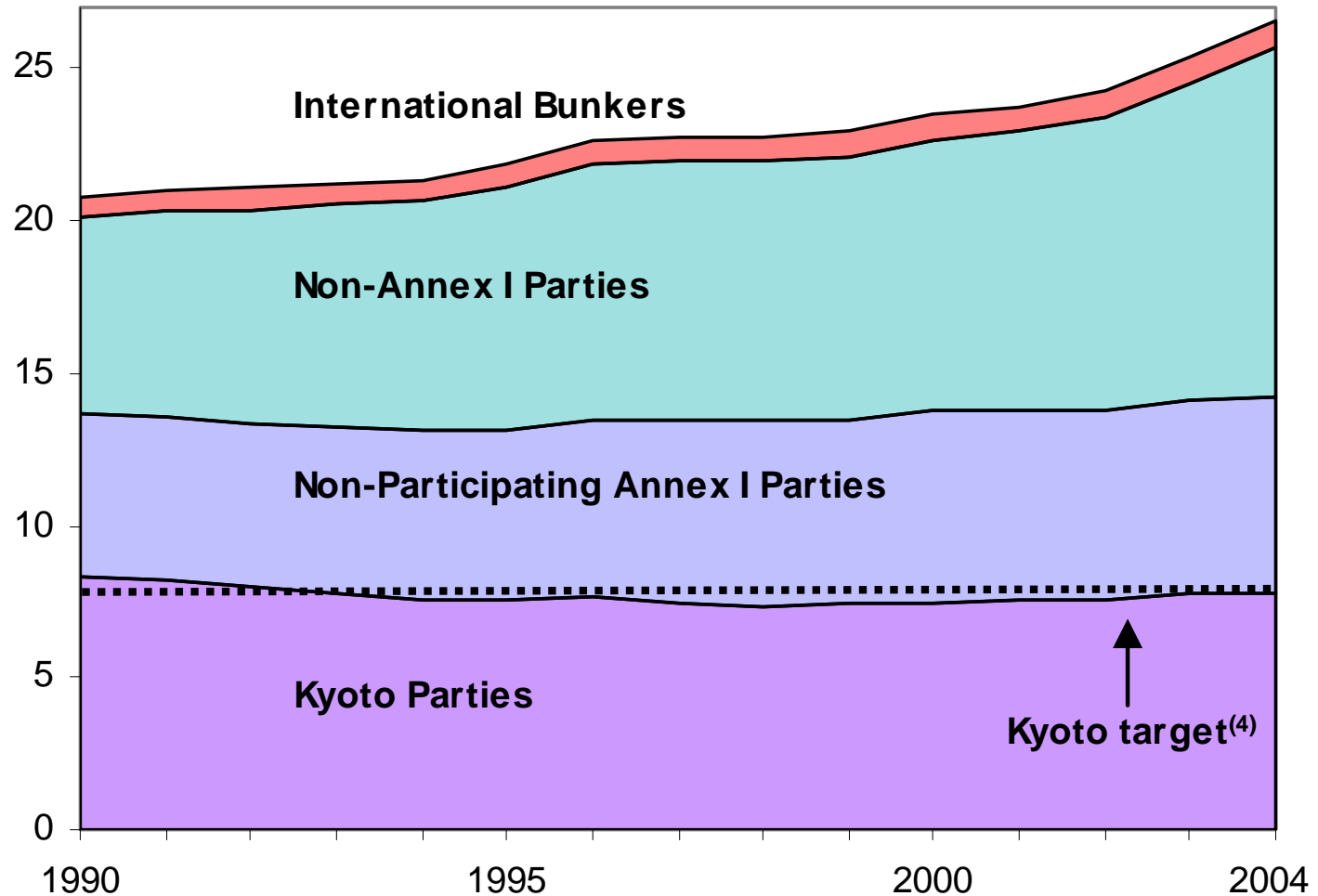
PRESS CONFERENCE

**Nairobi, 14 November 2006
UNFCCC – COP/MOP2**



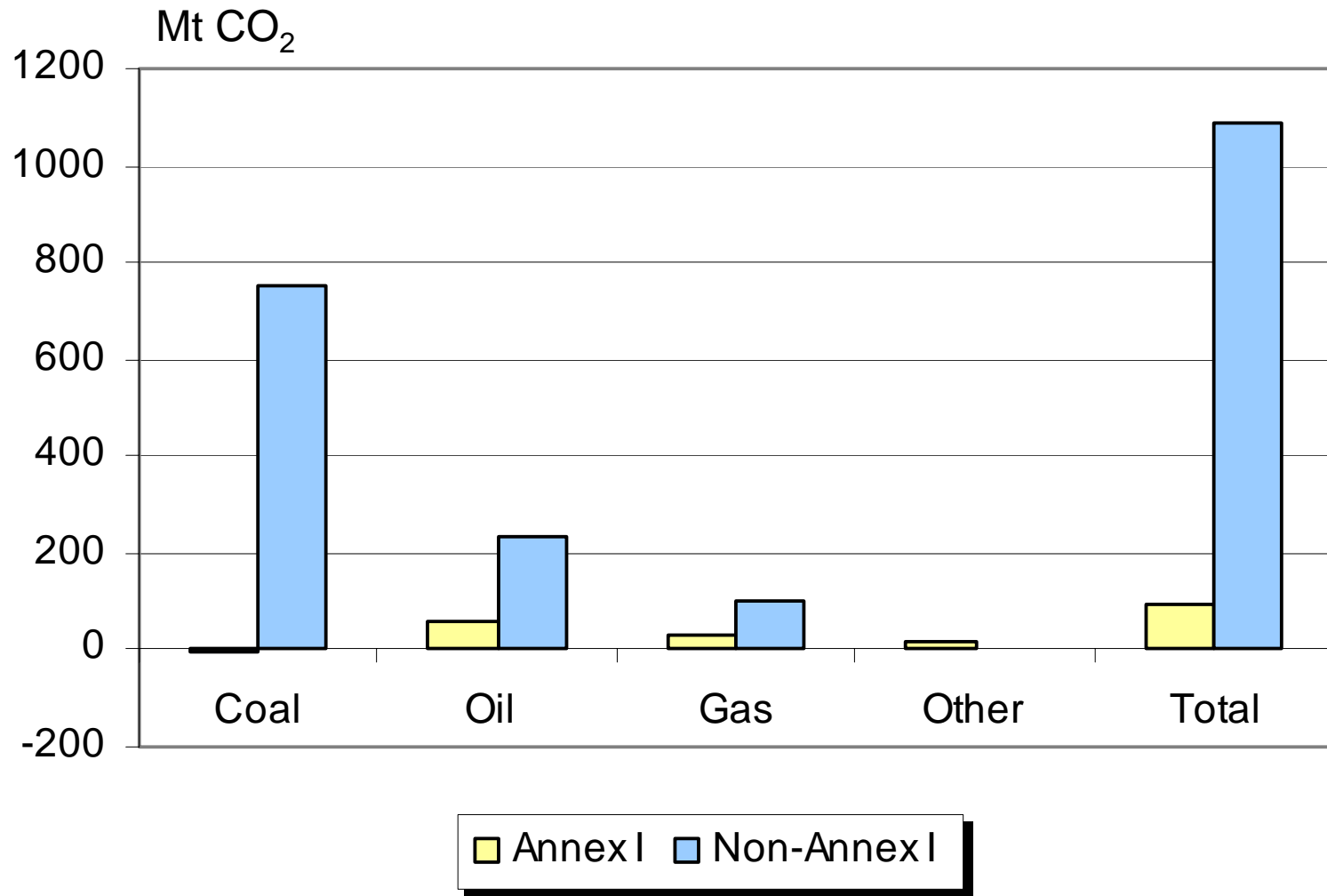
Global CO₂ emissions from energy are growing rapidly

Gigatonnes CO₂





Increase in global emissions by Parties and fuel (2003-2004)



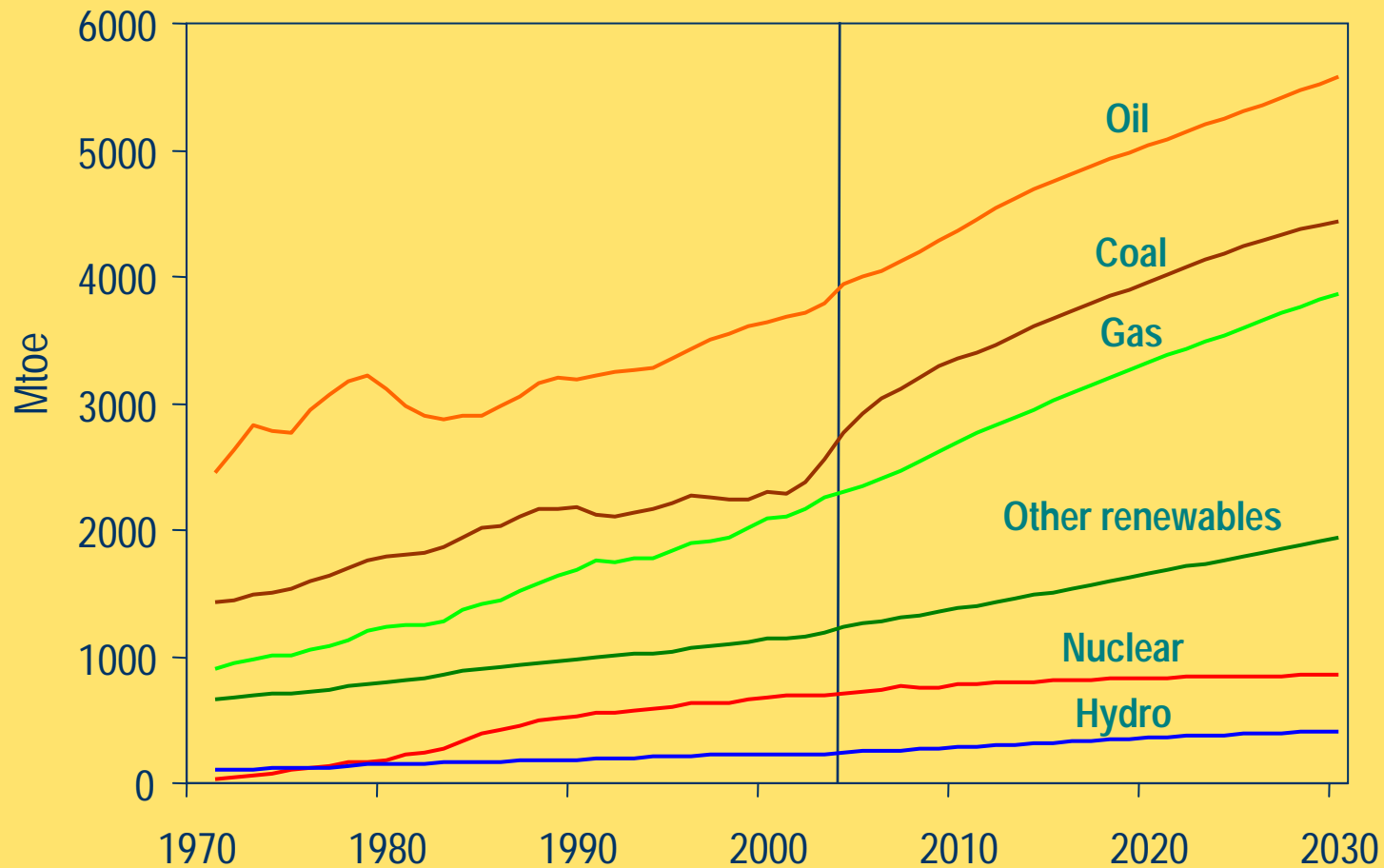


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World Energy Outlook 2006

The Reference Scenario: World Primary Energy Demand



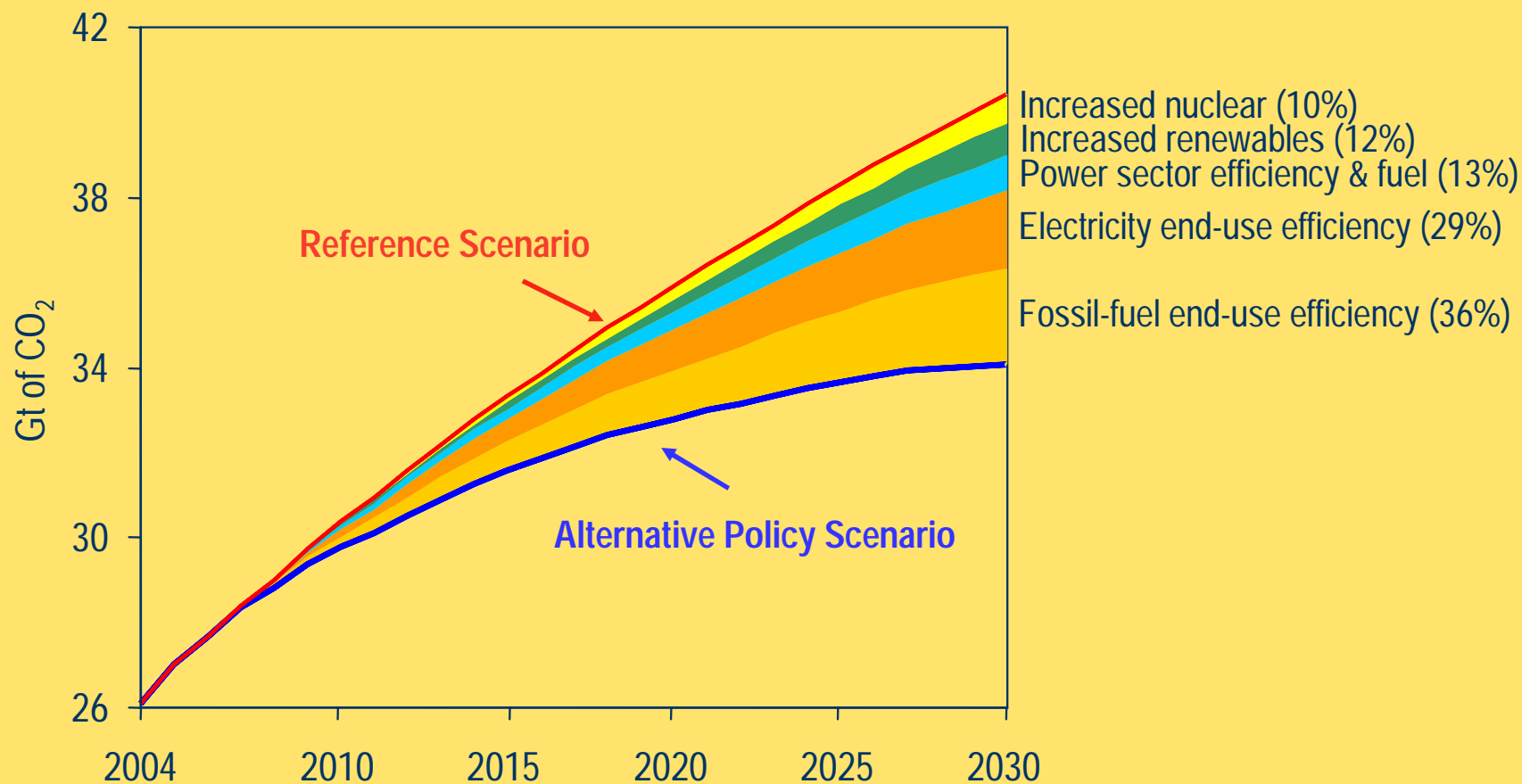
Global demand for each primary energy source grows inexorably driven by population & economic growth

Mapping Out an Alternative Energy Future



- Reference Scenario trends are not set in stone
- The **Alternative Policy Scenario** analyses impact of government policies under consideration
- Responds to call to IEA from G8 & IEA ministers
 - *To "advise on alternative energy scenarios and strategies aimed at a clean, clever and competitive energy future"*
- 1 400+ different policies worldwide to
 - *Improve efficiency in energy production & use*
 - *Increase reliance on non-fossil fuels*

Alternative Policy Scenario: Global Savings in Energy-Related CO₂ Emissions

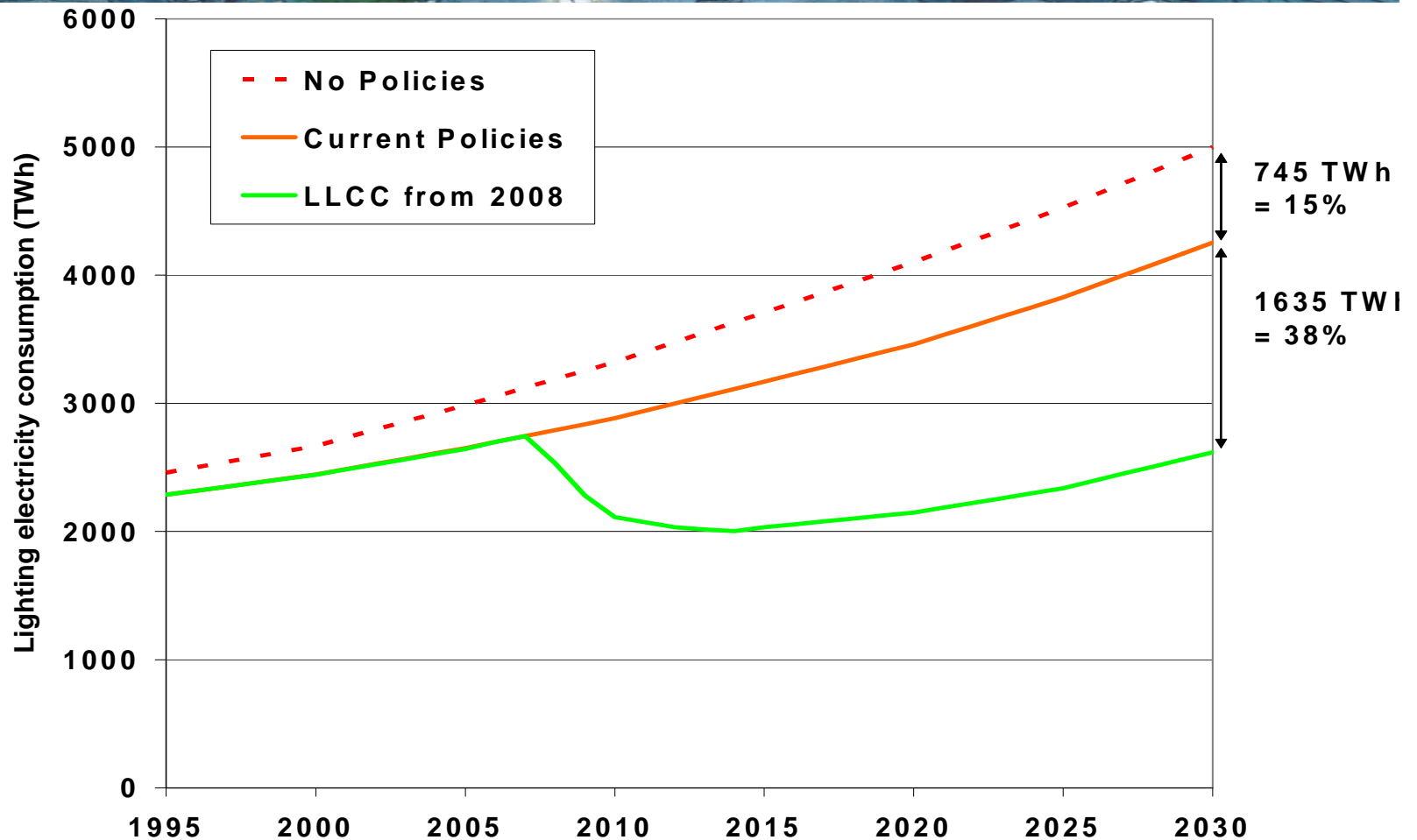


Improved end-use efficiency of electricity & fossil fuels accounts for two-thirds of avoided emissions in 2030



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Lighting: Cost-Effective Savings



Global lighting cost could be reduced by US\$ 2.6 trillion and 16 GtCO₂ could be saved (2008-2030)

**LIGHT'S
LABOUR'S
LOST**

Policies for
Energy-efficient
Lighting

Making the Alternative Policy Scenario a Reality

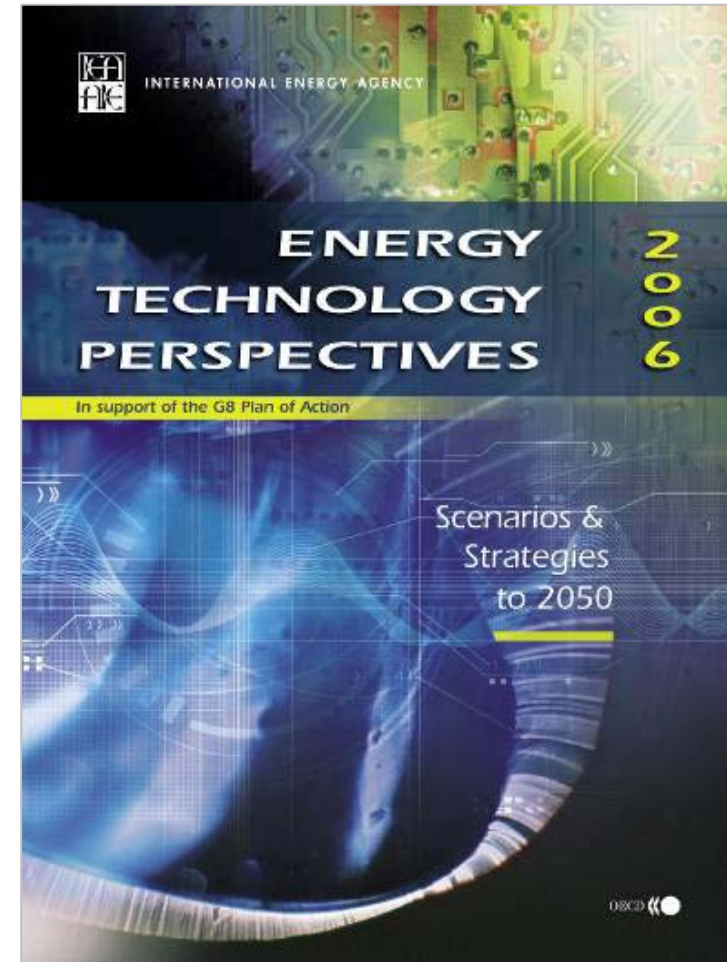


- Formidable hurdles exist to the adoption & implementation of the Alternative Policy Scenario
- It will require considerable political will to push through those policies
- Private-sector support & international cooperation will be essential
- It is cheaper than the Reference Scenario – energy and investment savings more than offset costs
- Action is needed urgently
 - ❑ *Emissions are rising faster than anticipated*
 - ❑ *Delaying implementation by a decade would reduce cut in cumulative emissions to 2030 from 8% to 2%*
 - ❑ *Delays in stepping up R&D – particularly carbon capture & storage – would reduce cut in emissions after 2030*

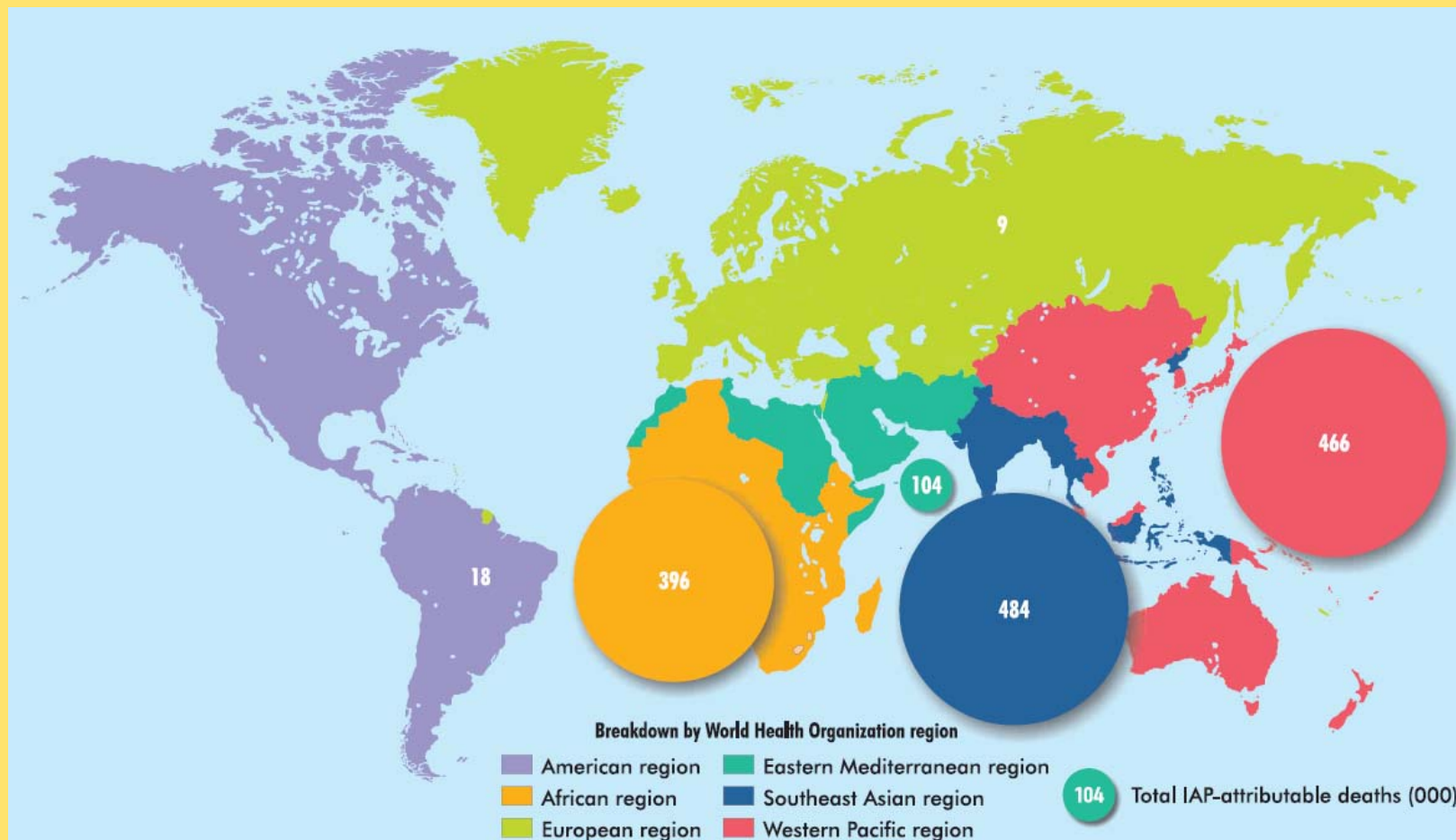


Energy Technology Perspectives Scenarios & Strategies to 2050

- A portfolio of current and emerging technologies can enhance energy security and help **bring global emissions down to current levels by 2050**
- A **carbon incentive** is needed to bring low carbon technologies to market by 2050

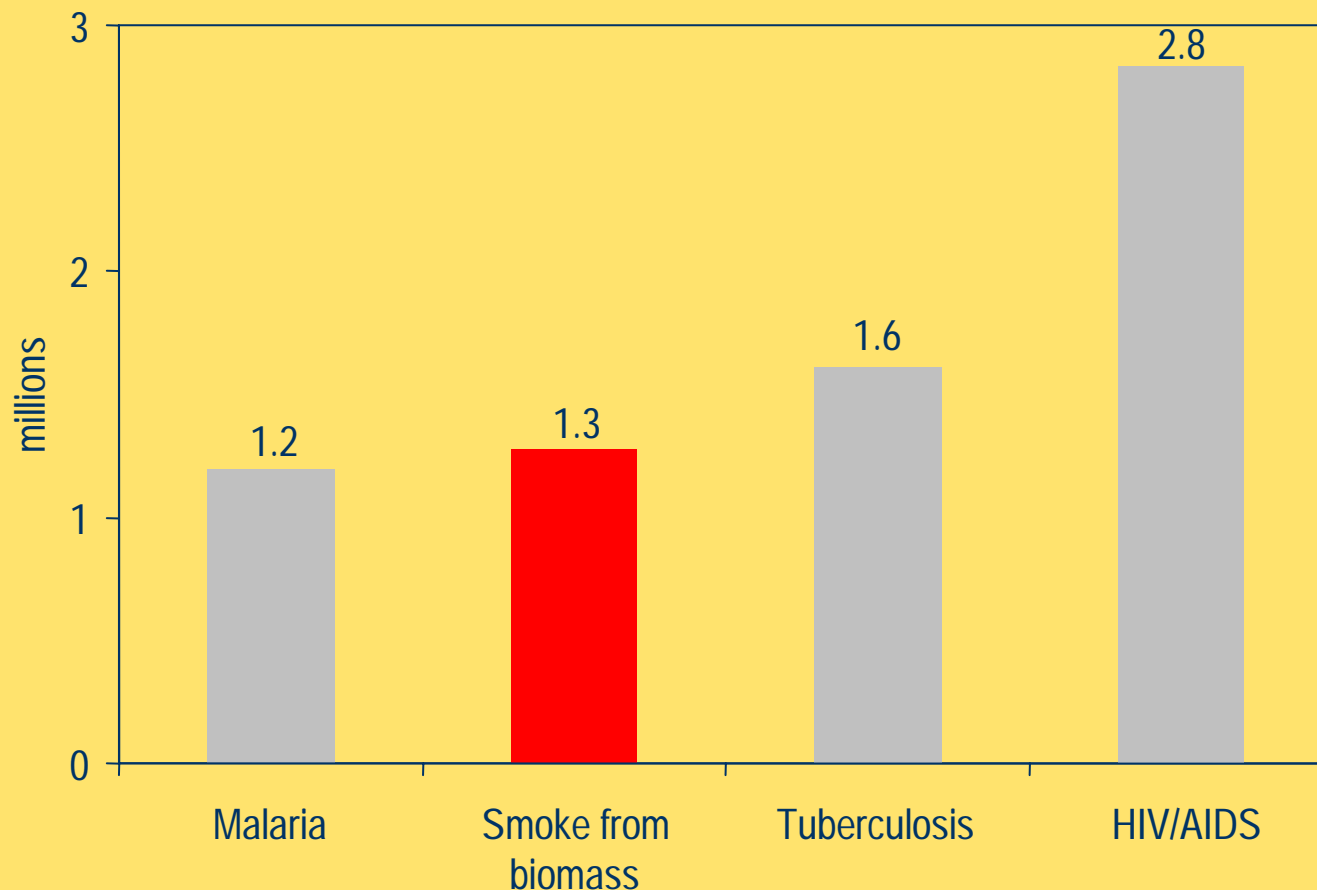


Deaths per Year Caused by Indoor Air Pollution



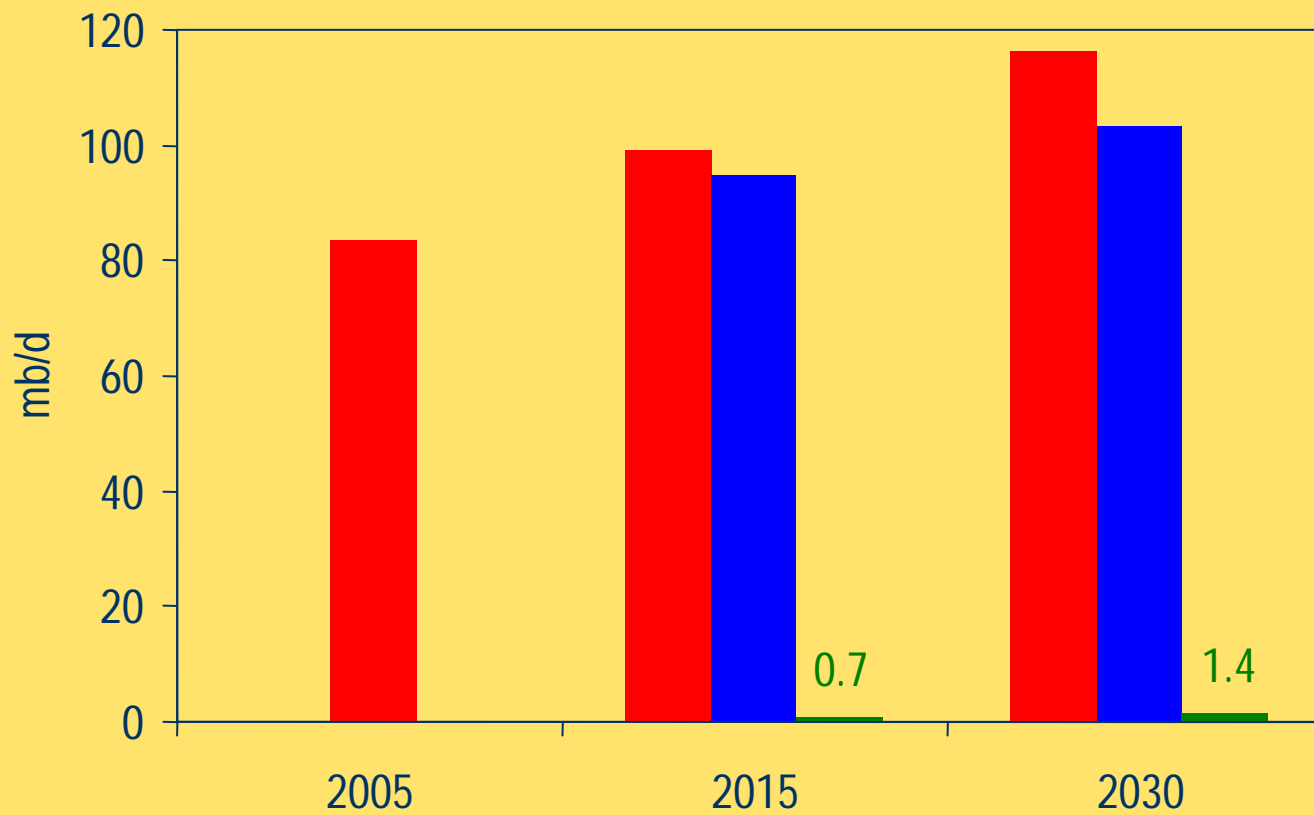
Extent of dependence on polluting fuels & inefficient stoves varies widely around the world

Energy Poverty: Annual Deaths from Indoor Air Pollution



The number of people using dirty traditional biomass for cooking is set to grow from 2.5 billion now to 2.7 billion in 2030 absent new policies

Impact on World Oil Demand of Replacing Traditional Biomass with LPG



■ Reference Scenario ■ Alternative Policy Scenario ■ Additional LPG*

* Reducing the number of households using biomass for cooking by 100% in 2030

***If every poor household using traditional fuels for cooking switched to
LPG, world oil demand would rise by a mere 1% in 2030***



Key messages

- **The world is not on a sustainable energy path**
- **Currently envisioned policies could lead us on a cleaner, cheaper and more secure path**
- **Improving energy efficiency is an essential component of alternative strategies**
 - **Governments must bridge the gap between current energy policy practice and more ambitious energy efficiency objectives**
- **In the long run, all technologies are needed to bring global CO₂ emissions back down**
- **IEA will continue to assist G8 and other countries towards an alternative energy path**



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