



The Global Energy Assessment *Status and Next Steps*

IIASA

International Institute for Applied Systems Analysis
and its international partners present the

www.GlobalEnergyAssessment.org

- **Science based, comprehensive, integrated, and policy-relevant** analysis of issues and options related to:
 - Energy and sustainability challenges
 - Resource and technology options, demand and supply
 - System issues, scenarios
 - Policy options
- Local, regional, and global dimensions

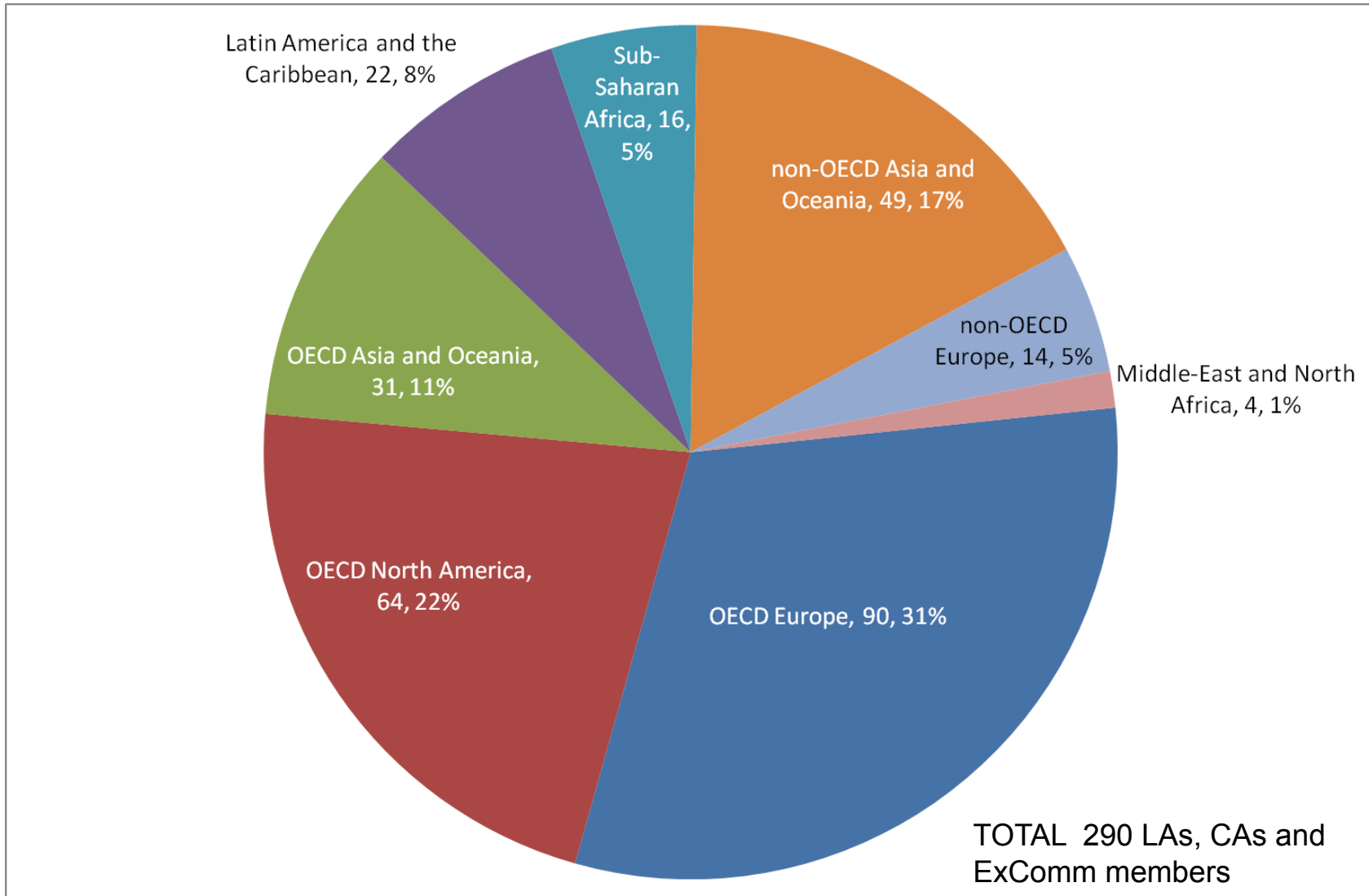
Towards a more Sustainable Future

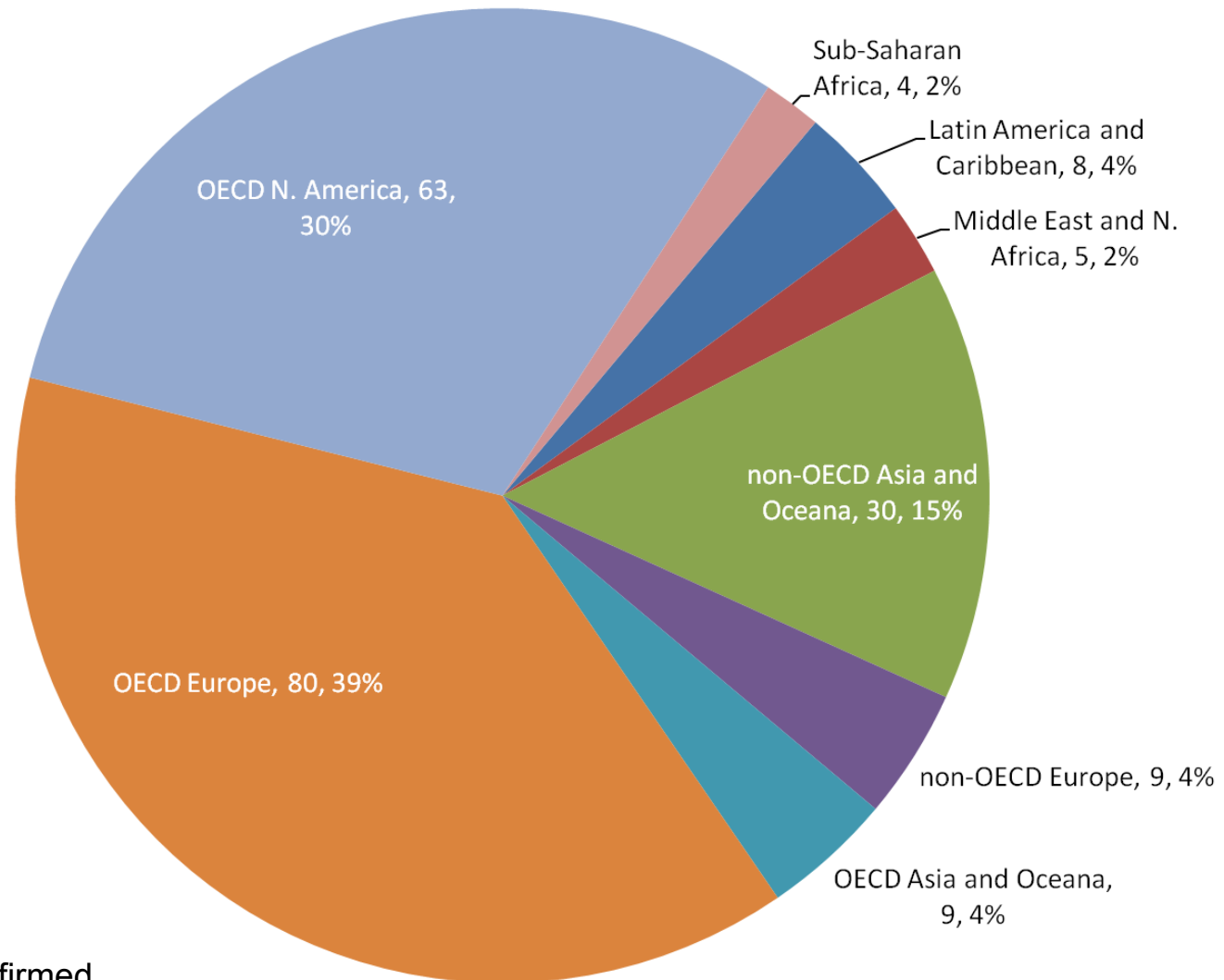
- Started work in 2006, now are at the point we can synthesize the assessment and have most of the resources to do so
- We have completed about $\frac{3}{4}$ SOD and have begun an iterative process of drafting the synthesis report
- SOD is out to peer-review coordinated by Review Editors.
- A writing team will be organized to prepare a strategic document with succinct summary of main messages
- Final report (Cambridge Univ. Press) in early 2011

- **Adopt** a broad framing of the problem, recognizing the multiple objectives and expectations from energy systems
 - address immediate, local needs leading to stronger and faster action
- **Look** for synergies amongst policy objectives and the realization of multiple benefits and co-benefits
 - pursuing access and security with mitigation co-benefits
- **Focus** on energy services (satisfaction of needs, rather than supply options)
 - improvement in the efficiency as the largest multiple benefits and highest cost-effectiveness
- **Promote** new integrated systems in policy design and approaches
 - transformative change and integrating across institutional silos
- **Seize** the opportunities of the development process
 - develop possibilities for leapfrogging toward new infrastructures

- GEA structure is organized around **Knowledge Clusters** comprising **Knowledge Modules**
- Structure was determined through an ongoing consultative process
 - Outline presented here is close to final
- Knowledge Clusters and Modules will be tightly integrated
 - sequential numbering in this presentation **does not** imply a sequential or linear approach within the GEA

- **Cluster I** characterizes nature and **magnitude** of challenges, and express them in selected indicators
- **Cluster II** reviews existing and future resource and technology **options**
- **Cluster III integrates** cluster II elements into systems, and links these to indicators from Cluster I
 - This will include energising of rural areas, land use, water, urbanisation, life-styles, etc.
 - Scenarios, using numerical models and storylines, will be used for the **integration**, in an **iterative** fashion
- **Cluster IV** assesses policy options, and specifically identifies **policy packages** that are linked to scenarios meeting the needs, again in an **iterative** fashion.





TOTAL 208 confirmed

International Organizations

GEF
IIASA
UNDESA
UNDP
UNEP
UNIDO
ESMAP (World Bank)

Industry groups

First Solar
Petrobras
WBCSD
WEC

Governments/Agencies

Austria - multi-year
European Union
Germany
Italy
Norway*
Sweden - multi-year
USA (EPA, DoE)

Foundations

UN Foundation
Climate Works Foundation
Global Environment & Technology
Foundation

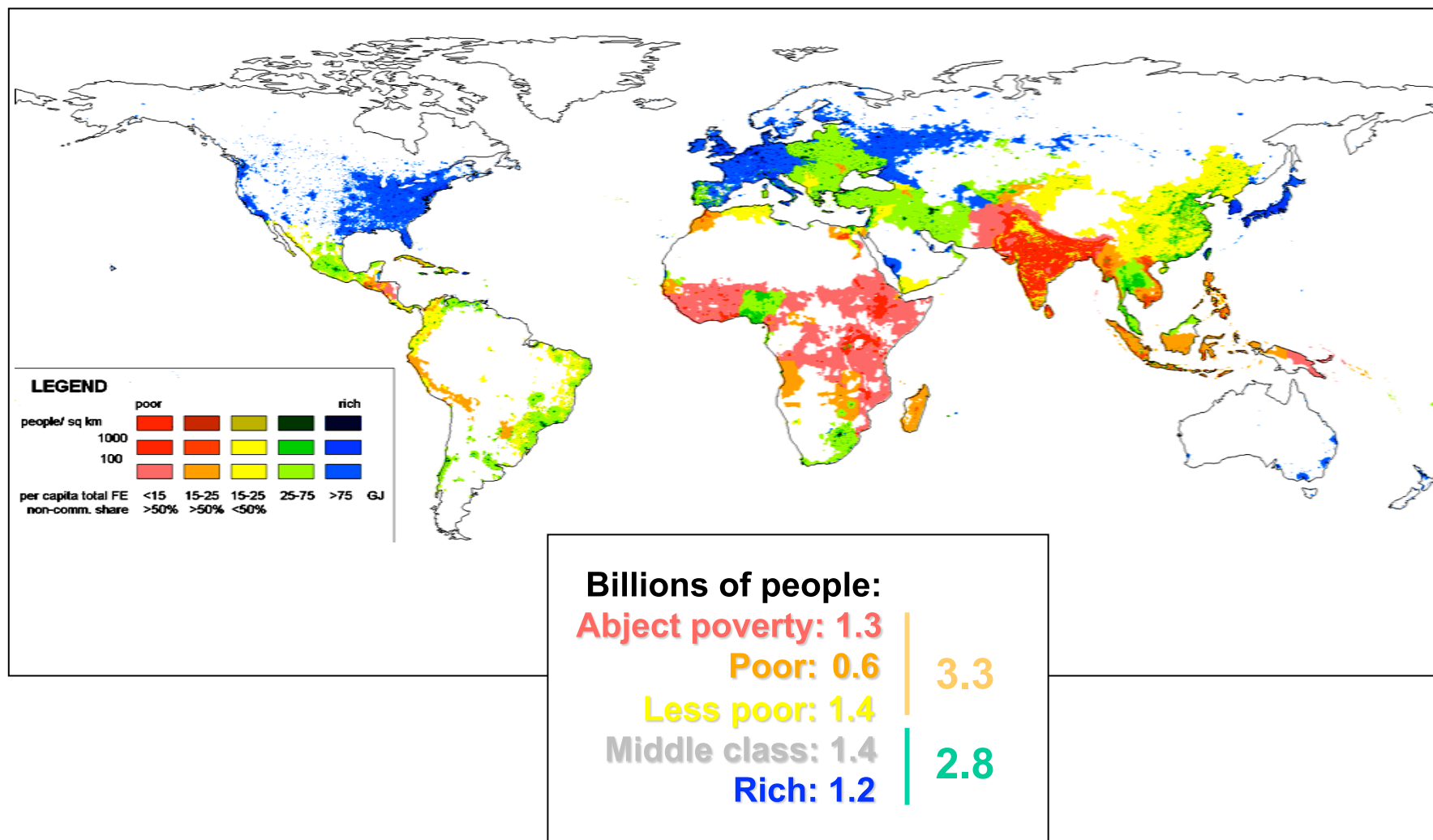
NOTE: * = under discussion

Launching – dissemination – policy dialogues 2011

- Publication target date: April - May
- “Concurrent” launching events in all the regions with help of Council and Ex Com Members, National Member Organizations of IIASA, UN and UNDP:
 - Asia: India, China, South Korea
 - Africa: Kenya, Ghana, South Africa
 - Middle East: Abu Dhabi (IRENA)
 - Latin America: Brazil, Chile (ECLAC), Guyana (Caricom)
 - US: Exploring with NSF on best way to proceed and with funding of DOE
 - Europe: European Commission in Brussels, Vienna Energy Conference in June 2011; possible meeting in Russia
- Policy Dialogues in key countries (GEF)

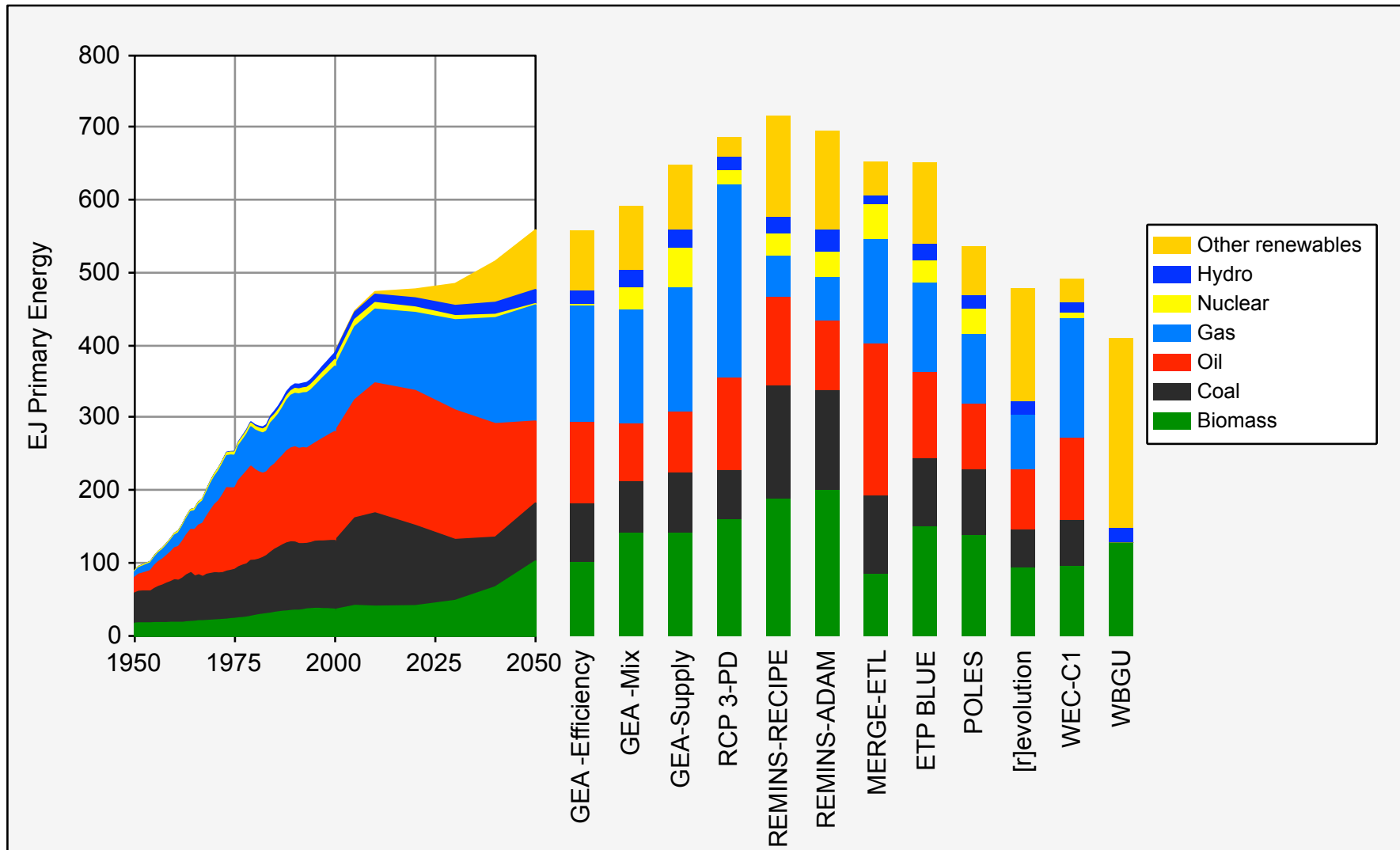
Mapping Energy Access

Final energy access (non-commercial share) in relation to population density



Source: Gruebler et al, 2009

- One Counterfactual (WEO & intermediate IPCC scenario B2)
- 3 fulfillment and transformational scenarios
- Counterfactual only for showing benefits of policy packages (and avoided impacts)
- Emphasis on 3 sustainability transformations
- 3 Modeling teams to develop all scenarios or just variants





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