

Building Webinar Series May/June 2014

IEA Building Activities and Project Plans

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Paris, 10 June 2014

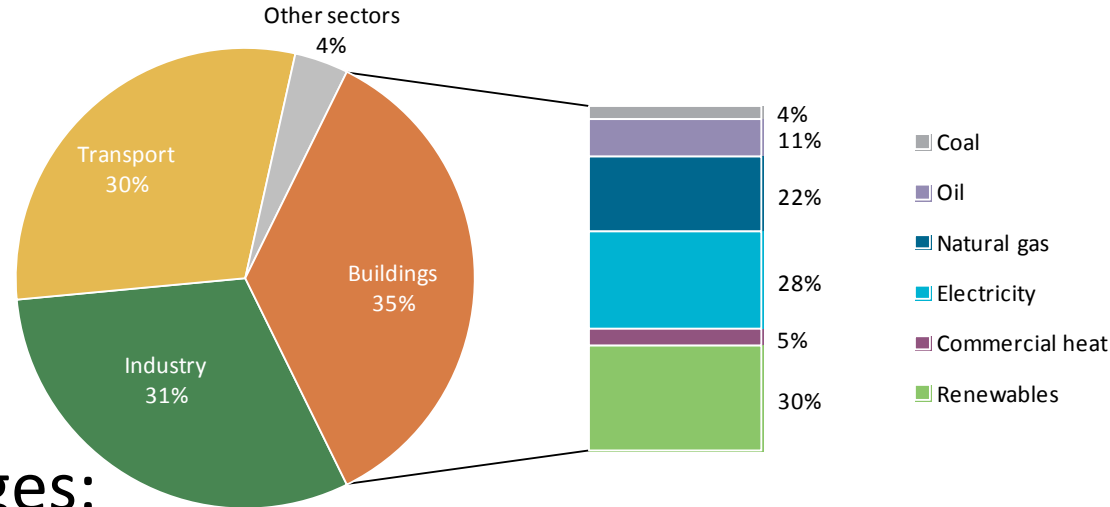
Webinar Series Objective: To seek advice from key global building stakeholders in the development of the IEA's new initiative for Sustainable Buildings. A key focus of the Partnership is to raise the importance of building energy efficiency among high level energy policy directors while providing the fundamental analysis to support more investment from both the public and private sectors.

- Webinar 1 – Building Programmatic Priorities and ETP 2014 (May 21)
- Webinar 2 – Capacity Building and Construction Transformation in Emerging Economies (May 22)
- Webinar 3 – Building Project Plans (June 10)
- Webinar 4 – Data and Analysis (June 23)

<http://www.iea.org/workshops/>

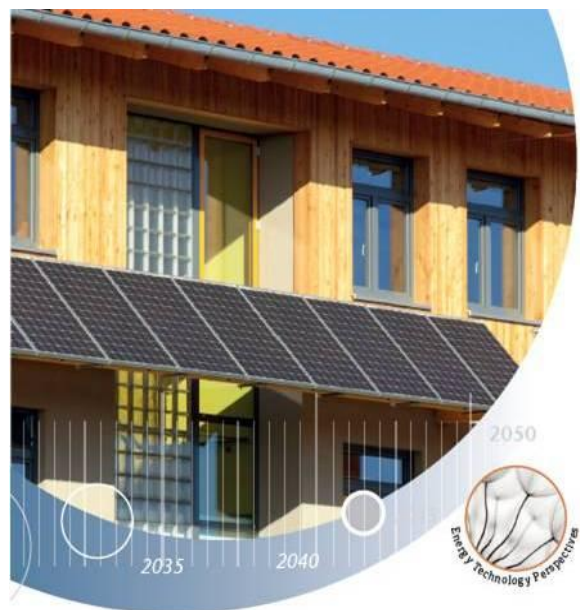
Importance of Buildings Sector

- Largest end-use sector
- 1/3 carbon emissions
- 50% of electricity
- Major portion of GDP
- Opportunities/challenges:



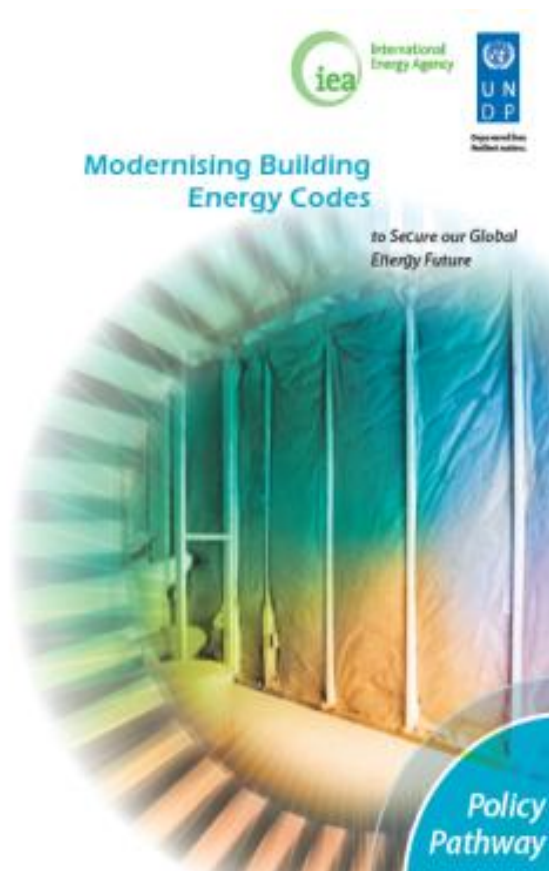
- 75% - 90% of OECD building stock still in service by 2050
- Large population growth in developing world will drive new floor area that needs to be efficient (2.5 billion more by 2050)

2013 Building Publications

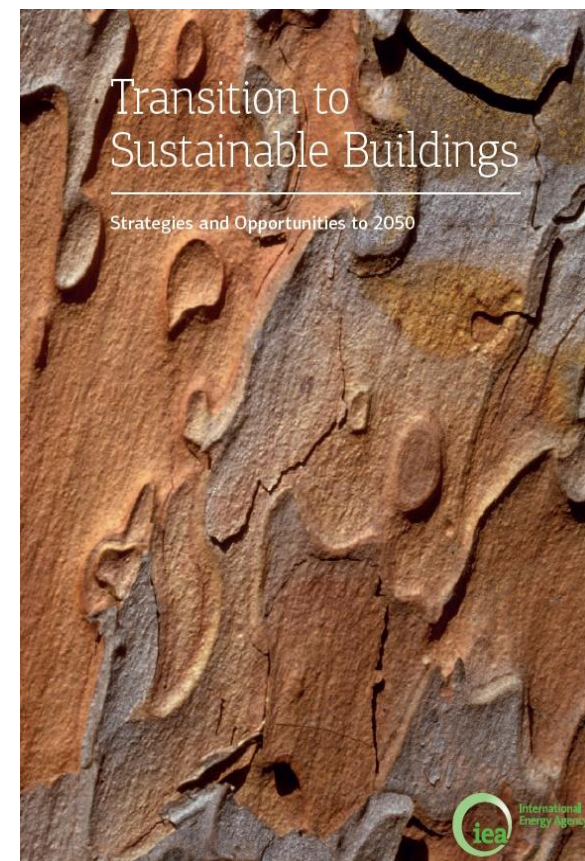


Technology Roadmap Energy efficient building envelopes

Dec 2013



Aug 2013



Jun 2013

Framework for Partnership – IEA Working to Improve Collaboration

International
Energy Agency



- IEA Building's model has 31 country and regions to cover the entire world
- Hybrid econometric model with stock and flow elements for building stock and equipment
- IEA extensive energy balances database and recent energy efficiency indicators data from most developed IEA member countries
- IEA working with multiple organisations on data collaboration but would like to expand this activity
- Hosting a series of webinars to seek greater stakeholder involvement and to improve communications

- Building modelling enhancements
 - More robust driver development/sensitivity
 - Review and updating of inputs and assumptions
 - Enhanced thermal model for more detailed deep renovation scenarios and integration with other sectors
- Joint research paper with Tsinghua University on building demand and solutions for China
- Expanding collaboration and interface with major buildings programs globally

- Stakeholder feedback has shown more interest in specific project proposals rather than comprehensive long-term partnership commitment
- IEA will consider possibly two or three new projects based on feedback from stakeholders and alignment to IEA core activities
- IEA is seeking feedback from stakeholders before developing detail project proposals with requests for funding and in-kind support
- All activity will include extensive collaboration and coordination with major global building organisations (e.g. IPEEC, UNEP SBCI, IFC, GBPN, BPIE, etc), IEA member governments, Partner Countries and stakeholders

- Building envelope implementation plan(s)
- Enhanced data set to drive technology adoption and policy formulation
- Building material standard harmonisation to support EE investment
- Establishment of multiple benefits for buildings to drive more assertive policies
- Enable more effective capacity building
- Facilitate policy recommendations for next EU EPBD and other building related policy directives

Building Envelope Roadmap Implementation Plans (DRAFT)

- Objective/background: Feedback from stakeholders has shown interest for the IEA to help implement the envelope roadmap by developing action plans for emerging country/region in collaboration with a co-developer (possible countries – China, India, etc)
- Scope: Address building and market barriers while working with large group of stakeholder to formulate construction transformation strategy
- Resources: ~ 200K with combination of funding and in-kind support
- Duration: ~ 12 months per country or region
- Deliverable: Regional/country action plan

Enhanced Data Set to Drive Technology Adoption and Policy Formulation (DRAFT)

- Objective/background: Significant effort has been made by CLASP/LBNL and the IEA 4E IA to establish benchmark and mapping data for equipment but much more effort is needed for both equipment and building materials
- Scope: The IEA would work with stakeholders and policy decision makers in collaboration with existing activities to gain access to proprietary data while working to improve collection of indicators data
- Resources: ~ 200K in funding and/or significant in-kind
- Duration: 18 to 24 months
- Deliverable: Access and publication of data will be tiered based on partners contributions and negotiations for disclosure, improved data will drive model results

Building Material Standard Harmonisation to Promote EE Investment (DRAFT)

- Objective/background: The envelope roadmap and recent IEA standardisation workshop recommended the coordination and collaboration on building material standardisation to promote energy efficient investment
- Scope: The IEA will work with leading standardisation organisations, manufacturers, academia, responsible government agencies and other experts to prioritise and formulate a plan to pursue harmonisation activities
- Resources: ~ 100K per year for at least three years with significant in-kind support
- Duration: Initial activity could be for 18 months but the project will require at least three years
- Deliverable: Standardisation strategy with endorsement by leading global material manufacturers, independent researchers, and governing agencies, leading to possible private-public agreements

Establishment of Multiple Benefits for EE Building Policies (DRAFT)

- Objective/background: The IEA will be issuing a major report on the significant additional benefits of energy efficiency policy but more work is needed to move from theory towards the adoption of more assertive policies based on these benefits
- Scope: Work to establish the leading quantifiable benefits for buildings public policy in cooperation with leading economic organizations and interested member governments
- Resources: ~ 200K of in-kind and direct funding
- Duration: 2014 – 2015 (approximately 12 – 18 months)
- Deliverable: Findings would be promulgated in ETP 2016 with case studies and recommended metrics for use in modelling, such as job creation from additional building sector investments and health benefits from investment in social housing programmes

Enable More Effective Building Sector Capacity Building (DRAFT)

- Objective/background: The IEA has extensive energy statistics, technology roadmaps, policy pathways, and training expertise that can be utilized to provide more effective capacity building activities with key partners and at a larger scale by leveraging the new IEA E4 programme
- Scope: The IEA will work to develop more effective training tools and delivery mechanisms that builds on a “train the trainer” concepts in collaboration with leading global researchers and manufacturers targeted toward proactive emerging economy governments and their influential stakeholder base
- Resources: Highly variable dependent economies targeted, exact scope, duration, etc. Initial funding of at least 100K will be needed to develop initial core materials
- Duration: Parallel with the IEA E4 programme, through 2017
- Deliverable: Training and educational materials, E4 reporting

Facilitate Policy Recommendations for the EU EPBD (DRAFT)

- Objective/background: The EU has one of the world's most assertive public policy activities to pursue energy efficiency in buildings but yet still has some of the most energy intensive buildings in the world. The effort would enable the world's experts to recommend key actions to shape the future of the EPBD and other building energy efficient directives
- Scope: IEA could convene EU and world experts to contribute to key recommendations to allow the effective implementation of the next EPBD for 2017, possibly others
- Resources: ~ 100K of in-kind and/or direct funding
- Duration: 2014-2015 (12 to 18 months)
- Deliverable: Policy recommendations brochure with supporting analysis, inclusion of key findings in ETP 2016

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Download Envelope Roadmap - free

<http://www.iea.org/publications/freepublications/publication/name,45205,en.html>

Download Building Code Policy Pathway – free

http://www.iea.org/publications/freepublications/publication/PP7_Building_Codes_2013_WEB.pdf

IEA Bookstore – Buildings Book – discounts to non-profits, partners, and bulk orders

<http://www.iea.org/W/bookshop/add.aspx?id=457>