

## **Closing remarks**

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- Need to move to more inclusive policy development processes building on the views of all stakeholders – design policy using the 'charrette' techniques used by architects
- Need to move from voluntary to mandatory policies
- Policies need to be packaged to cover all aspects of building energy efficiency and all elements of the package should be connected.
- Disclosure is an underused but high impact policy
  - involves publishing the energy performance of existing buildings
  - creates a market for assessment tools and auditors
  - these in turn allow for benchmarking energy performance of various building types motivating improvements in performance and giving governments essential data to improve targeting of policy measures
- Building passports will also help many aspects of policy implementation
- Health and well being is becoming an important element of policy design
- Also need policies that enable and drive investment

## Building Planning and Design: key takeaways

- Sufficiency: reduce the need for energy-using services (such as cooling)
- Buildings don't use energy, people do
- Key technologies:
  - Shading: exterior (moveable and/or fixed) and landscaping
  - Windows: Low-e and double pane
  - Insulation: insulated concrete, wall insulation and even new insulated plaster
  - Ventilation: natural and hybrid ventilation
  - Design: integrated design, design charrette, building orientation,
  - Reflectance: cool roof, cool walls and green roof
- Key policies:
  - Building codes: shifting from voluntary or partial coverage to full mandatory
  - Incentives: non-financial and financial incentives to transform the market
  - Green building certification: shifting toward zero energy or zero carbon buildings
  - Building passport: building data and information disclosure, sharing and storage
- Enablers: capacity building, benefits analysis, progressive adaptive comfort, information exchange between countries

## **Building Systems and Operations: key takeaways**

- There is an important role for government in setting out the minimum energy performance standards and labelling schemes that the market can respond to. These should be progressive and compulsory
- At the same time, **public** and **private organizations** are also responsible for setting policy that can have an important **influence on creating a market**, such as through **procurement** and public **targets** for their building stock.
- Capacity building is needed to improve the familiarity and use of building energy management systems and facility management systems.
- Capacity building also needed to design flexible and hybrid systems capable of adapting to flexible thermal comfort demands and outdoor conditions.
- Smart controls and digital systems are expected to be taken up quickly across many building system and appliances and can provide an opportunity for supporting maintenance and auditing systems.
- There is an increasing move towards **improving comfort** and **wellbeing** through **smart** and **flexible controls**
- **Building passports** and **disclosure** are promising tools to promote action on energy efficiency in existing buildings

- Welcome to the IEA family
- Share information on policies in the region
- Develop a Buildings and Construction Roadmap for Asia
  - Stakeholder engagement opportunities
  - Review draft targets and timelines
- What would you like to happen next?
- Keep in touch:
  - buildings@iea.org
  - https://www.linkedin.com/groups/8765060/
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