

Guided Discussion on energy efficiency and COVID-19 stimulus for Roadmaps

- The converging crises of the COVID-19 pandemic and ongoing threat of climate change means there is a pressing need to address climate change through recovery efforts.
- The potential for 'building back better' is critically important for the long term sustainability of the built environment and how it fits into plans for a resilient recovery.
- Countries around the world have announced policies and actions that have sought to address the COVID-19 recovery and climate change together.
- The built environment is among the most important sectors of many recovery plans and offers enormous potential to address near and long-term CO2 emissions, act to protect health and support economic prosperity.



• Examples of policies include:

Singapore

o **Building sector**Co-creation of Singapore Green Building Masterplan with industry and community

Singapore is reaching out to a wide range of stakeholders, who are spatially dispersed due to telecommuting arrangements (e.g. using digital platforms), to better understand public perception on how green buildings can play a part in post-COVID-19 recovery.

Indonesia

Building sector

Improvement of energy efficiency in buildings (offices and commercial buildings)

Reference — http://ebtke.esdm.go.id http://km.reddplusid.org/d/566f0ea4f6c2e947f36795c8f58ba901 http://ditjenppi.menlhk.go.id/peraturan-perundangan.html (Summary NDC and Its Progress)

Contact — Ministry of Energy and Mineral Resources
 Ministry of Environment and Forestry





• Examples of policies include:

United Kingdom

Advanced New Building Techniques - £26 million to support advanced new building techniques in order to reduce build costs and carbon emissions in the construction industry.

Reference - https://www.gov.uk/government/news/pm-commits-350-million-to-fuel-green-recovery https://www.gov.uk/government/news/adigital-greener-and-higher-quality-construction-industry-being-backed-by-36-million-government-funding/

Contact - Department for Business, Energy and Industrial Strategy, and UKRI

Denmark

• Building sector

Green renovation and housing agreement: In Denmark a political agreement has recently been entered to ensure green renovation of the social housing sector in 2020 and 2021-2026 for 30 billions dkk. The agreement entails a structural shift in the Danish National Building Fund's support system containing a new green support criterion, a new green guarantee and a fund for experiments which will improve energy efficiency of buildings in the social housing sector.

Reference - https://www.buildup.eu/en/news/green-recovery-denmark-new-renovation-scheme-social-housing-sector





 The focus of this session is to examine and discuss the potential that stimulus actions focused on the built environment can have to support the recovery from COVID-19 and address the long-term sustainability of the built environment.

We welcome questions from the audience via our moderated chat.



Across the ASEAN region, which technology areas have been the focus of energy efficiency policies under stimulus announcements?

- a. Building envelopes
- b. Heating systems
- c. Cooling systems
- d. Lighting
- e. Appliances and equipment
- f. Building management systems (BMS)



Aside the pandemic and economic focus, what other benefits of energy efficiency have been included in these announcements?

- a. Carbon emission reductions
- b. Resilience to climate change
- c. Building related health and wellbeing
- d. Energy pricings
- e. Energy security
- f. Air quality improvements
- g. Productivity
- h. Energy access



Which of the following actions would have the biggest short term benefit to address the health and economic crisis?

- a. Priortise sustainable urban planning and development
- b. Prioritise new building energy codes and standards
- c. Accelerate action on building retrofits
- d. Develop and adopt energy efficient operation and maintenance standards
- e. Promote the use of low carbon materials
- f. Building in resilience for building and communities
- g. Accelerate access to clean energy



Which of the following actions could have the biggest long term benefit to address the sustainability of Asia's building stock?

- a. Priortise sustainable urban planning and development
- b. Prioritise new building energy codes and standards
- c. Accelerate action on building retrofits
- d. Develop and adopt energy efficient operation and maintenance standards
- e. Promote the use of low carbon materials
- f. Building in resilience for building and communities
- g. Accelerate access to clean energy



Which area of sustainability innovation within the buildings and construction industry will most help address the challenges of the pandemic over the coming year?

- a. Modular building techniques
- b. Onsite digital construction technologies
- c. Diversified local and low-carbon materials supply sources



