

15. Electricity imports

This sector considers the possibility of directly importing electricity from neighbouring areas such as India, Bhutan and Nepal. To do this would require building, or expanding, cross-boundary power lines. Such imports are likely to come from Himalayan hydroelectric sources, and have not been counted against Bangladesh’s emissions.

The last decade

At present, a 500MW link to India has already been established. Bangladesh has been importing small quantities of electricity (50MW) since 2013. If the trans-border railway is electrified, further links might be required.

Assumptions of model

The major assumption is that imported electricity does not count towards Bangladesh emissions.

Levels

Level 1

In Level 1 there are zero imports.

Level 2

Current policy. 500 MW is imported starting in 2015

Level 3

500MW is imported in 2015, this is doubled in 2020 to 1 GW

Level 4

In Level 4 this is further doubled again by 2025 to 2GW. This is equivalent to adding 10 new hydroelectric stations the size of Karnafuli Hydroelectric power station and relies on neighbouring areas having spare capacity to sell.

Interaction with other levers

There is no modeled interaction with other levers. An electrified trans-border railway might require similar infrastructure to be built, but the energy flowing across the border might be set to have no net import/export.

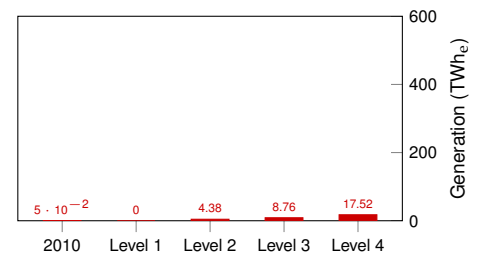


Figure 15.1: Projected Capacity in 2050

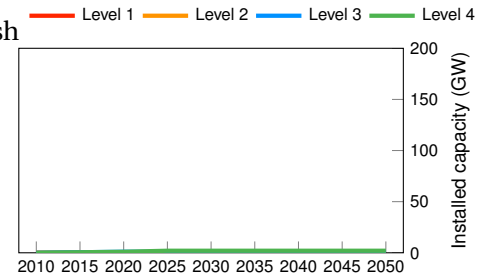


Figure 15.2: Development of capacity by scenario