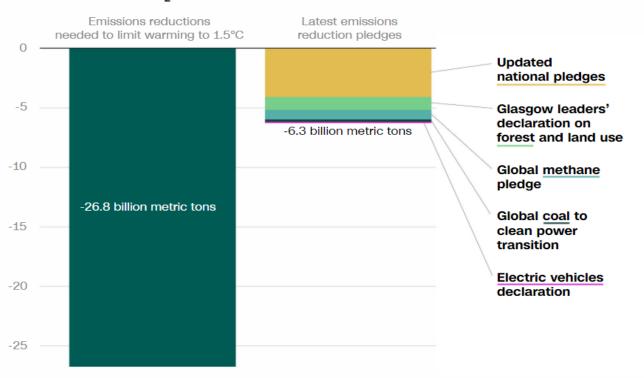


COP26 Underlines Key Role for Innovative Grid Technologies for a Faster, Less Expensive, and More Resilient Energy Transition

The eyes of the world have been on COP26 over the last two weeks. Efforts like those to speed the transition from coal-fired generation and toward electrification of the world's transportation fleets promise to help meet looming emissions goals. currENT congratulates the participants on coming to an agreement and in particular the reference to accelerating efforts towards the phaseout of coal; yet more needs to be done, as the graph below shows:



Estimated reductions in annual global greenhouse gases by 2030, compared to current policies, in billion metric tons of CO_2 equivalents.

Note: Chart uses average estimates for current policy level projections and median estimates for emissions leading to 1.5°C of warming.

Source: Climate Action Tracker Graphic: John Keefe, CNN

Every new scientific report on the accelerating impacts of global climate change seems to emphasize more starkly the urgency of accelerating efforts to decarbonize our economies. Energy issues have also caught the general public's attention in other ways, as recent increases in energy prices have brought renewed attention to the potential costs of the transition.



Innovative grid technologies are key to both issues. Such technologies as dynamic line rating, modular power flow technology, and superconducting high voltage cable systems provide increased capacity on our networks faster, less expensively, and more resiliently going forward. To that end, currENT has commissioned a study of the impacts of increased European deployment of innovative grid technologies: more than 90% of curtailment of Renewables and congestion costs in grids can be avoided. Participate in our launch and <u>webinar</u> on December 8th.

To better take advantage of the benefits of innovative grid technologies and to make up for the obvious gap between COP 26 commitment and the urgently needed action, currENT recommends policymakers require the following –

- 4 Apply the "NOVA" principle to network development plans, i.e. optimization before reinforcement before expansion,
- \checkmark Include innovative grid technologies in the network planning toolbox,
- \checkmark Consider that innovative grid technologies can be deployed faster, less expensively, and more resiliently,
- $\cancel{2}$ Expand cost-benefit analysis to consider a wider range of economic, environmental, and social impacts, and
- $\cancel{2}$ Reconsider CAPEX-oriented regulatory frameworks which reward more expensive network solutions at the expense of more efficient ones.
- Of course, the scale of the challenges before us requires both traditional expansion of our networks as well as better integration of innovative grid technologies in existing and new lines. The climate emergency as highlighted by the COP talks and the public's increasing concern over the costs of energy highlight the need to adopt innovative grid technologies that are on the shelf with no delay.

Susanne Nies, Board Chair currENT Rena Kuwahata, Vice Chair of the Board, currENT Christian Kjaer, Vice Chair of the Board, currENT

And all members