1.2 Web Tool for Mapping Storm Surge and Sea-Level Rise 'Se Havnivå i kart' (Norway)

OECD GP Activity	UN SF Activity	UN SD Goals / Targets
3. Natural hazard analysis, Natech Risk Analysis	1. Understanding disaster risk	12.8 By 2030, ensure that people … have the relevant information and awareness for sustainable development …

Classification according to OECD Guiding Principles, UN Sendai Framework Priorities/Activities, and UN SDGs and Targets

Figure 1: Map view of flooded areas, in parts of Bergen municipality, with 200-year storm surge in 2090

Source: © downloaded from the web tool Se havnivå i kart © Norwegian Mapping Authority

Short Facts:	Natural Hazard(s) Considered:
Governance approach: Risk communication **Source:** The Norwegian Mapping Authority **Entry into force:** November 2018 **Targeted Stakeholders:** Authorities, operators, the public **Scope of applicability:** National, regional	• Sea level rise • Storm surge **Climate change:** Considered

Description

The national sea level observing system is operated by the Norwegian Mapping Authority, Kartverket. Floods of rivers and estuaries that are caused by heavy precipitation events fall under the responsibility of the Norwegian Water Resources and Energy Directorate (NVE) and are not included in the monitoring system.

Kartverket has launched the web tool 'Se havnivå i kart' where users can learn about potential risks from present-day storm surges and future sea level rise and take measures for prevention in risk management. The web tool also has applications for the adaption to climate change. Users can download statistics on at-risk buildings, areas, and infrastructure along with inundation layers for GIS applications.

This tool aims to help coastal planners make responsible decisions with regard to storm surge and sea level rise. It is not a substitute for on-site visits when it comes to site-specific decisions, however.

Users of this tool have the options to change the 'sea-level' tab between now and a 2090 scenario. The 'storm surge height' can be varied between mean high water (i.e. areas that can flood permanently) or a 20, 200 or 1,000 year storm-surge interval. 'Alternatively, a manual slider can be used to simulate a specific change in sea level rise. The guidelines come from the Norwegian Directorate for Civil Protection (DSB), while the report 'Sea Level Change for Norway- Past and Present Observations and Projections to 2100.' served as a basis for the numbers and projections.

It should be noted that data used in this web tool does not take into account wave effects, or possible climate change-related changes to the tidal regime or possible changes to the characteristics of storm surges.

Link/Contact:

https://www.kartverket.no/en/sehavniva/visualize-sea-level/

Comments by the UN/OECD Natech-Steering Group:

A detailed evaluation of sea level rise and flood levels may be required for decisions on the siting of new installations.

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