

CLIMATE CHANGE: THREAT OR OPPORTUNITY FOR BELGIAN SEA FISHERIES?

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Sea fisheries are an important activity for the coastal community of Flanders from a socio-cultural-economic point of view. It's apparent that the Belgian fishing fleet operates in a complex, changing and uncertain environment. The strong specialization of the Belgian fleet with regard to fishing method (93% beam trawlers) and target species (mainly flatfish) makes the Belgian fisheries sector rather vulnerable to these continuously changing circumstances. Recently the sector is faced with yet another factor which contributes to the growing uncertainty: climate change. Climate change will most probably impose additional pressure on the sea fishery, but may also offer opportunities.

There are strong indications that the ecosystem in general and the (commercial) fish stocks especially were, are and will be affected by climate change. The spatial distribution and/or recruitment of species important for the Belgian fisheries like sole, plaice and cod were already affected by climate change. More southern commercial species, like red mullet and John Dory, which are currently not important for Belgian fisheries but have a high economic value and are still quota free species, are likely to increase their northerly presence in response to climatic warming. Further temperature rises are likely to have profound impacts on commercial fisheries through continued shifts in distribution and alterations in community interaction. In addition the direct influence of the primary climate changes (storminess, changing currents, etc.) affect the functioning of the fleet.

Based on these findings the consequences for the fleet were detailed and the elaboration of scenarios for the secondary impacts at different points in time (2040, 2100) is ongoing. The scenarios serve as a basis for identifying possible responses of the fisheries sector. Adaptation strategies — including measures like changing the operation and the structure of the fleet, divert to other fishing grounds, opt for other target species and/or fishing methods, etc. — will be developed and evaluated on their sustainability. These adaptation strategies should contribute to the development of the Belgian fishery into an innovative, flexible and durable activity; able to cope with changing circumstances, including climate changes.