

### Policy Brief No.5

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**Project name:** MOSES: Maritime, Ocean Sector and Ecosystem Sustainability: Blue Growth Pathways for Ports

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**Further Reading:** The full report is available to download here:

[http://mosesproject.eu/ban/wp-content/uploads/2021/03/ONIA\\_Ports\\_v1.pdf](http://mosesproject.eu/ban/wp-content/uploads/2021/03/ONIA_Ports_v1.pdf)

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### Realising sustainable 'Blue Growth' pathways for Ports

Due to increasing globalisation and containerisation, ports play a significant role in international logistics chains, handling over 80% of world trade. Port activities contribute significantly to international, as well as local and regional economies, with 14 out of the 20 economically strongest cities in the world being port cities. Ports, however, have potentially negative impacts on the environment. Adopting transition management as a broad analytical framework through which to understand existing marine management regimes and to stimulate thinking about how more sustainable regimes may be realized in the future, this policy brief outlines highlights of research on a case study of Belfast Harbour that explored the complexities and uncertainties in dealing with sustainable blue growth in the ports and shipping sector over the long-term.

### Research Findings

Change drivers likely to impact the development of ports over the short-, medium-, and long-term until 2050 were identified and were categorised using the Political, Economic, Social, Technological, Legal, and Environmental (PESTLE) framework. These refer to changes following Brexit trade arrangements (P); coping with economic instability and uncertain flows of investment (E); civic unrest in response to social injustice & inequality (S); emerging digital & SMART technologies (T); new legislative and regulatory changes (L); and biodiversity loss (E). Then three future pathways were suggested through which the ports and shipping sector can respond to these drivers: a) the 'stable' future pathway that reflects short-term change and is based on past experiences and predictions of the future to enhance economic stability; b) the disruption and resilience pathway that fosters resilience, adaptability and a capacity to respond to unexpected shocks with a focus on the medium term and; c) the managed innovation pathway that utilises innovation to flexibly steer towards managed, long-term change.

### Policy implications

The findings revealed that a future development pathway that embraces innovation and applies technology to advance managed, long-term change is the most advantageous resolution towards sustainable blue growth in ports and shipping. A 'managed innovation' pathway seeks to implement radical change through the utilisation of technology as well as novel management approaches, impacting local, national, and international arrangements, and thus being also relevant in the Atlantic Area. It is also informed by transition management and horizon scanning and is based on a long-term perspective, to deal with future developments in a managed manner.