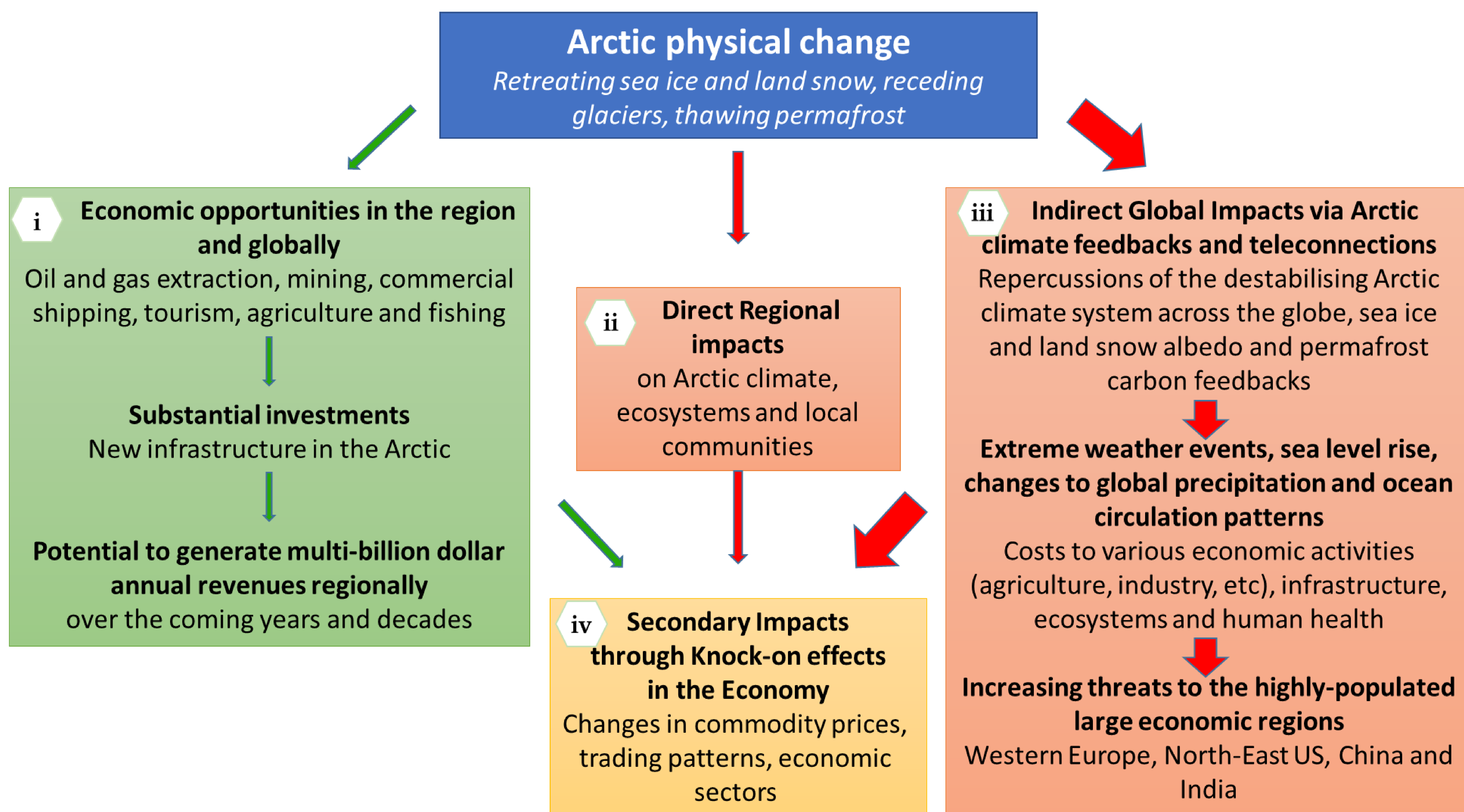


# A framework for assessing the economic impacts of Arctic change



Benefits and costs of Arctic change: a holistic view

Source: Alvarez, J., Yumashev, D. & Whiteman, G. *Ambio* (2019). <https://doi.org/10.1007/s13280-019-01211-z>

The scientific literature on physical changes in the Arctic region driven by climate change is extensive. In addition, the emerging understanding of physical feedbacks and teleconnections between the Arctic and the rest of the world suggests that the warming in the Arctic region is likely to cause impacts that extend well beyond the region itself. However, there is only limited research on how Arctic change may affect economies and individual industry sectors around the world. We argue that there is a pressing need for more research on this topic and present a conceptual framework to guide future research for assessing the regional and global economic impacts of Arctic change, including both possible benefits and costs. We stress on the importance of a transdisciplinary approach, which includes an integration of the natural sciences, economics and social sciences, as well as engagement with a wide range of stakeholders to better understand and manage the implications of Arctic change.

Jimena Alvarez  
Lancaster University  
Pentland Centre for Sustainability in Business  
E: [m.alvarez@lancaster.ac.uk](mailto:m.alvarez@lancaster.ac.uk)

