

Introduction

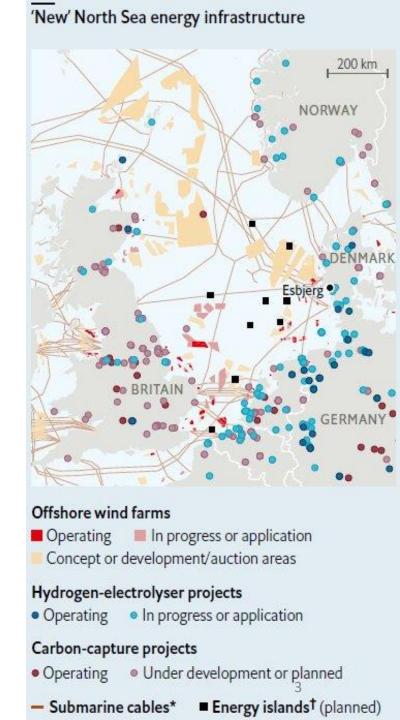
- Critical maritime infrastructure vulnerabilities
- Nordstream pipeline sabotage a wake-up call
 - 'the network of underwater cables and pipes on which Europe's power and communications depend were not built to withstand the "hybrid warfare" being pursued by Moscow and other NATO adversaries.'
 - Vice Admiral Didier Maleterre, deputy commander NATO MARCOM
- Military responses risk escalation and classic security dilemma
 - Attempt to increase own security can make others more insecure, prompting escalation
- CMIP: unlike military security
 - Offshore infrastructure is essentially undefended
 - Offensive actions likely to be grey zone attacks
 - Defence is almost impossible, offense has a major advantage
- Paper identifies four other distinct security dilemmas in CMIP
 - Not military escalation, but making the thing one is trying to secure more insecure



'Old' North Sea energy infrastructure 200 km NORWAY Wilhelmshaven GERMANY Oil and gas pipelines* Oil- and gasfields LNG import terminals Under construction or planned Operating Speculative

1. The Dilemma of Mapping

- Publishing infrastructure locations aids coordination but may guide attackers
- Current mapping patchy and inconsistent
- Dilemma complicated by range of public and private stakeholders
- "Almost 200 Russian ships suspected of spying in the North Sea"



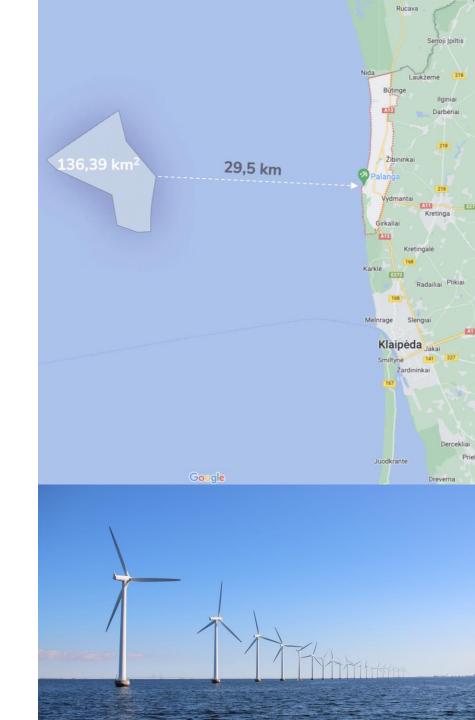
2. The Dilemma of Surveillance

- Enhancing monitoring, especially if militarized, could provoke escalation
- Spectrum of choices
 - additional commercial telemetry, shared
 - active military sensors
- E.g. Belgian government
 - putting cameras on windfarms
 - 'drone in a box'
- Infrastructure status (military, civilian, critical) may affect perceptions and target picture



3. The Dilemma of Cost

- In non-war conditions, key factor is cost rather than existential security
- Security measures add costs in an already challenging economic environment
- Perception of risk alone can deter investors and push up insurance costs
- Example: Lithuania cancels offshore wind tender citing geopolitical risk
 - Energy Minister Dainius Kreivys
 - "geopolitical situation in our region"
 - offshore wind market has "changed dramatically and investors face many obstacles"





4: The Dilemma of Securitization

- Securitization: Discursive construction of threats to enable action
- Dilemma: Talking up threats may reveal vulnerabilities to adversaries
 - And may reveal most critical/valued infrastructure
 - May push up risk/risk perception/costs
- But, companies need clear signal of threat to justify security investments
- Stakeholder discussions
 - may helpfully raise awareness
 - or unhelpfully hype threat

Areas for future research

- Costs and security
 - Some energy companies already used to danger (e.g. Middle East, Nigeria)
 - How to factor risk into renewables locations?
 - Renewable energy nationalism vs. global market
- Information sharing platform competition
 - State systems, NATO, EU, private sector
 - Extra business costs of reporting
 - Who will share what with whom?
 - Who benefits?
 - E.g. intelligence use build picture of 'normal' to know 'exceptional'
 - Or sharing alerts with stakeholders? (like shipping)
- Securitization dynamics among stakeholders
 - State designations/non-designations of threat
 - Company interactions with states re. threat
 - Interactions within companies re. security investment

