

Waste Derived Fuels

The Future of RDF Export

RDF Conference

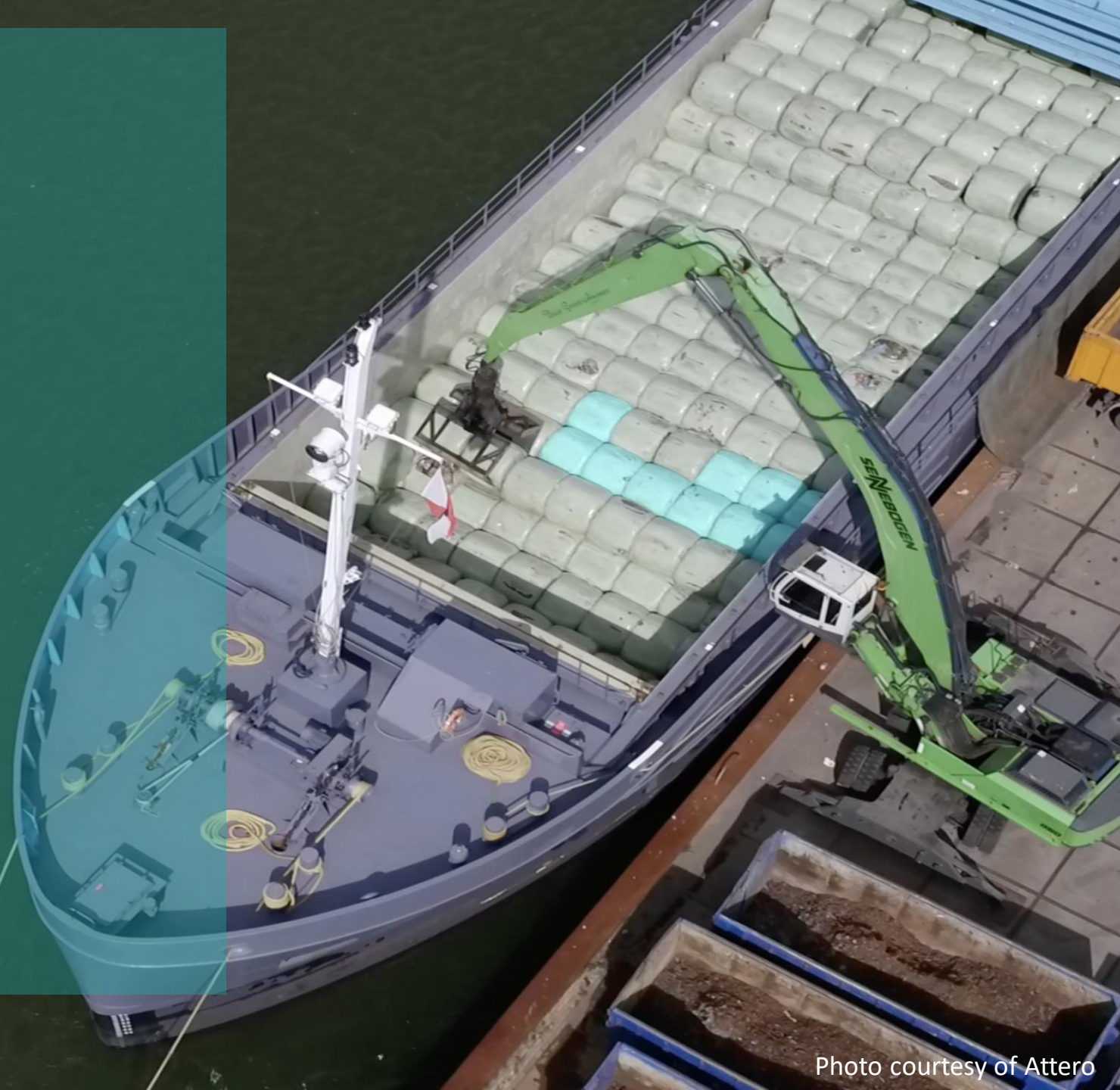
November 2022



Photo courtesy of Attero

Agenda

- *Introduction to RDF Industry Group*
- *Introduction to Future of the RDF Market*
- *Selected Countries*
- *Summary*



Introduction to the Group

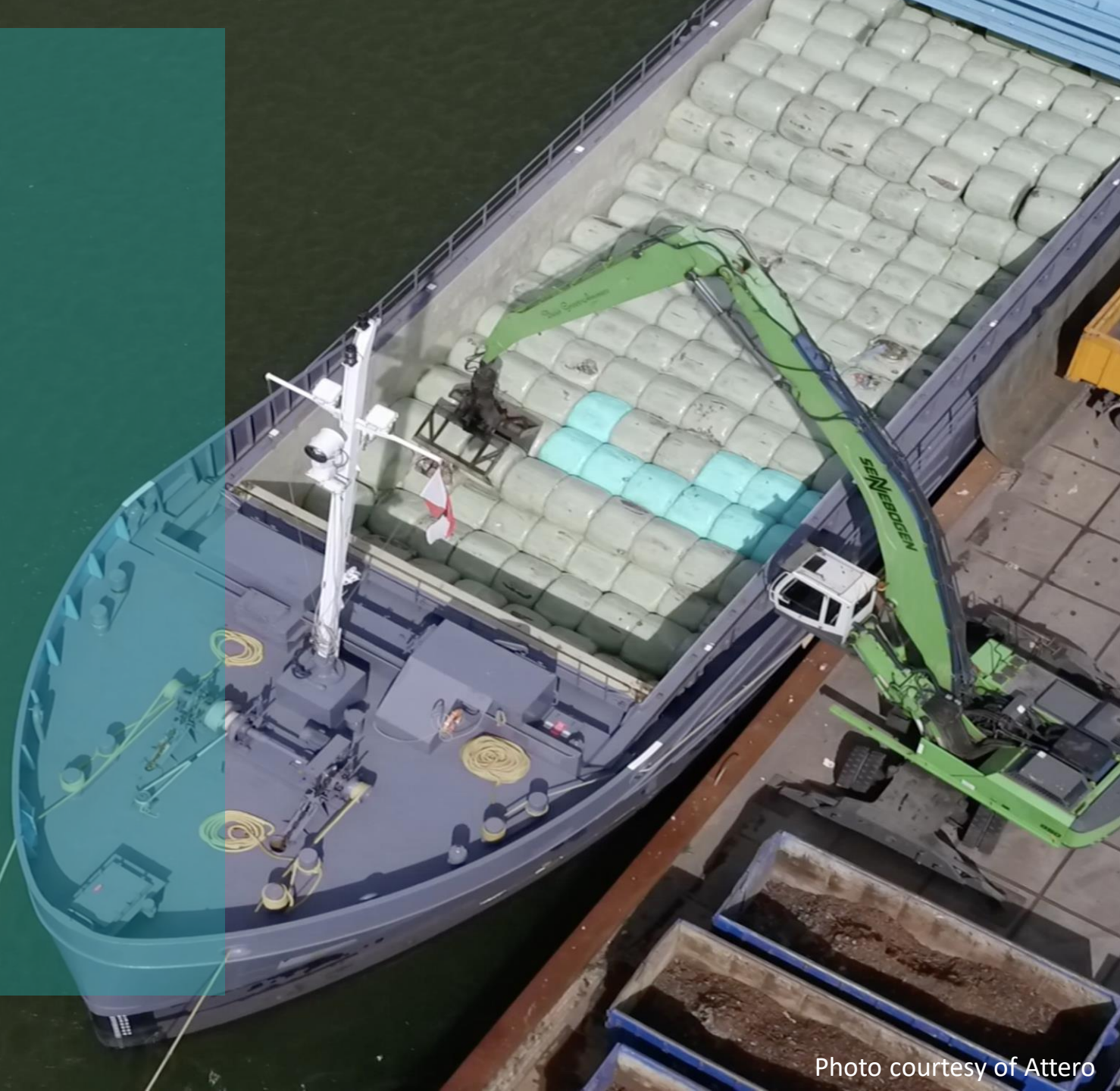


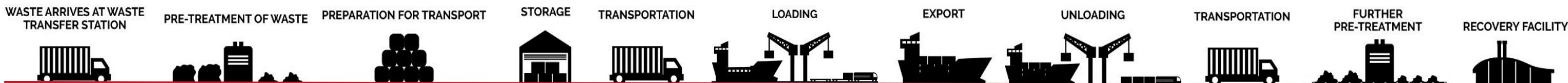
Photo courtesy of Attero

Represents organisations:

- across the waste derived fuels (WDF) supply chain
- covering intra-European WDF flows

Aims to:

- work collectively to provide a platform to address issues faced by the sector and to explore new opportunities
- promote efficient utilisation of capacity across Europe



RDF

INDUSTRY GROUP

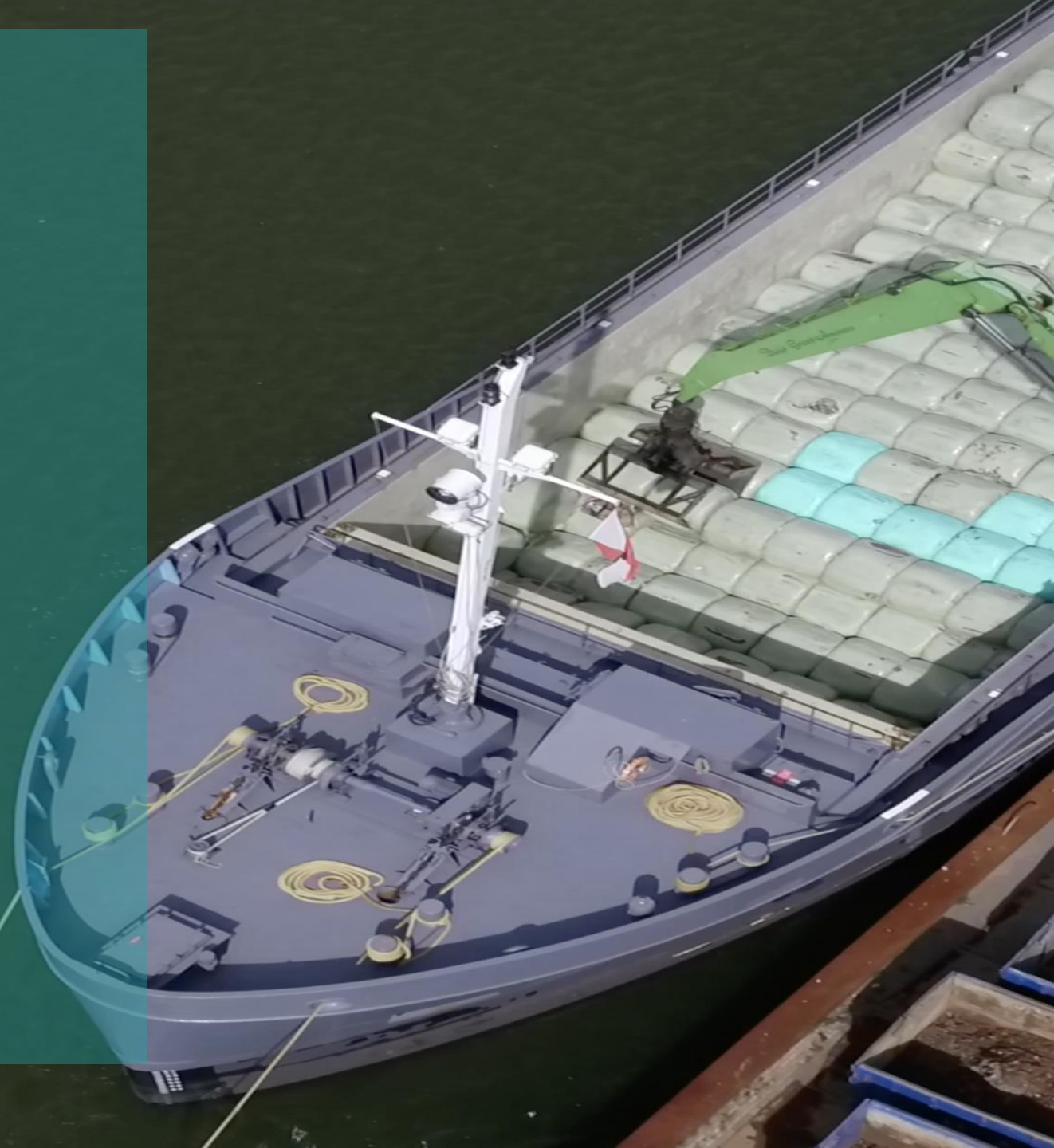
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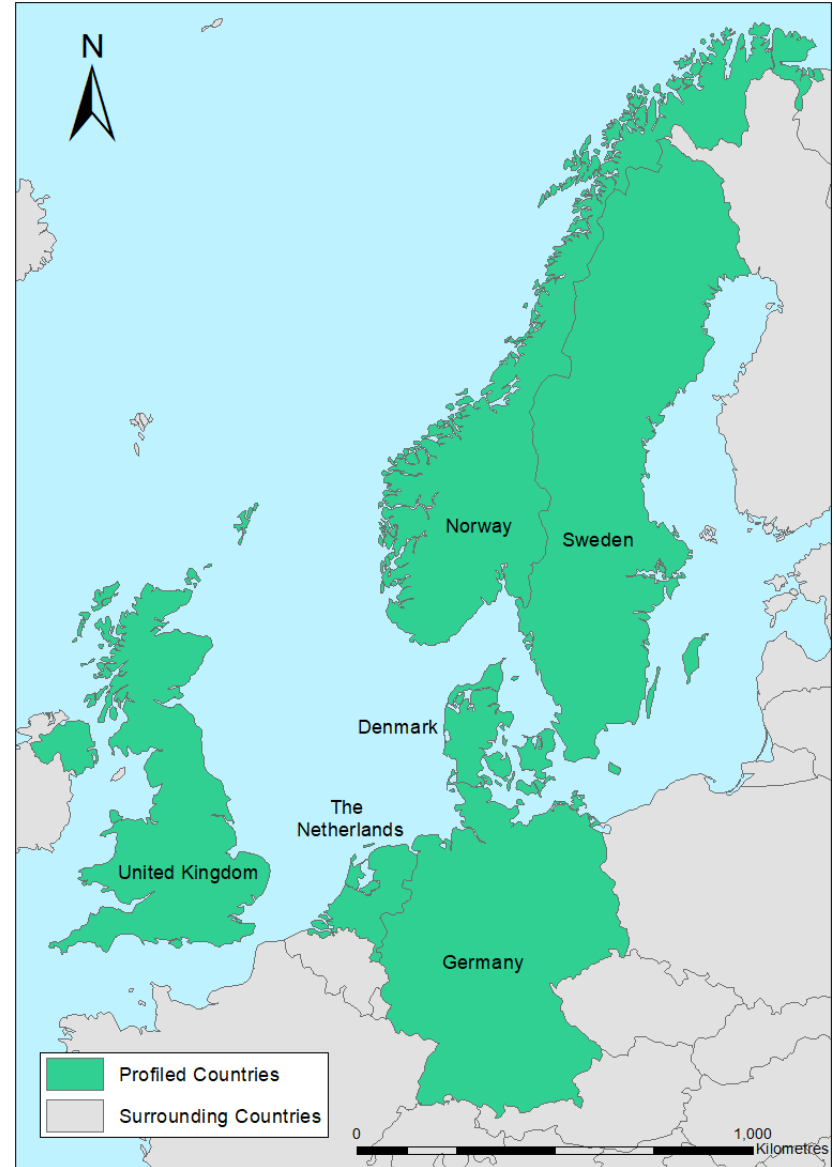
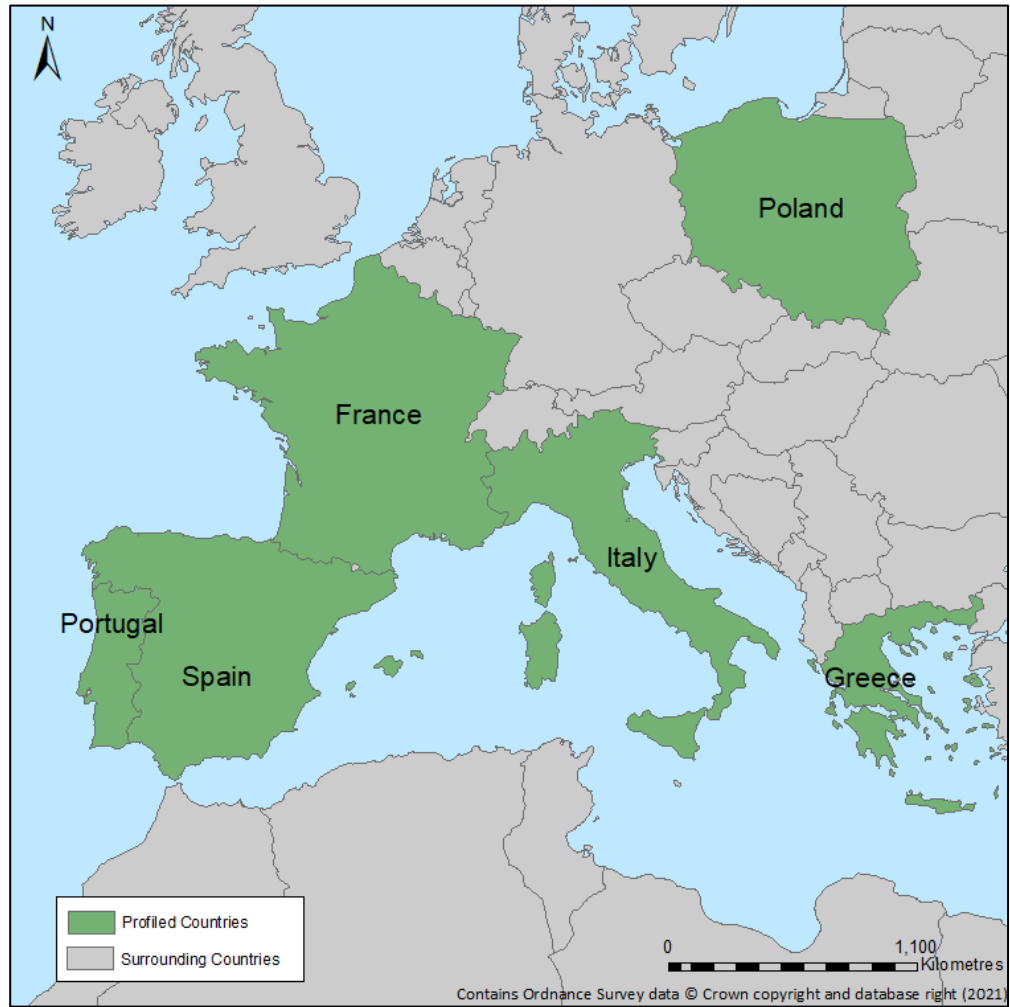


GEMINOR



Future of the RDF Market





Historic dominance of western and northern Europe in the WDF export market

The war in Ukraine and reduction in gas supply leading to increases in energy prices

Economic downturn across Europe causing shortages in waste supplies

Past



Present



Future

EU Exit and its impacts on regulation, uncertainty and logistics

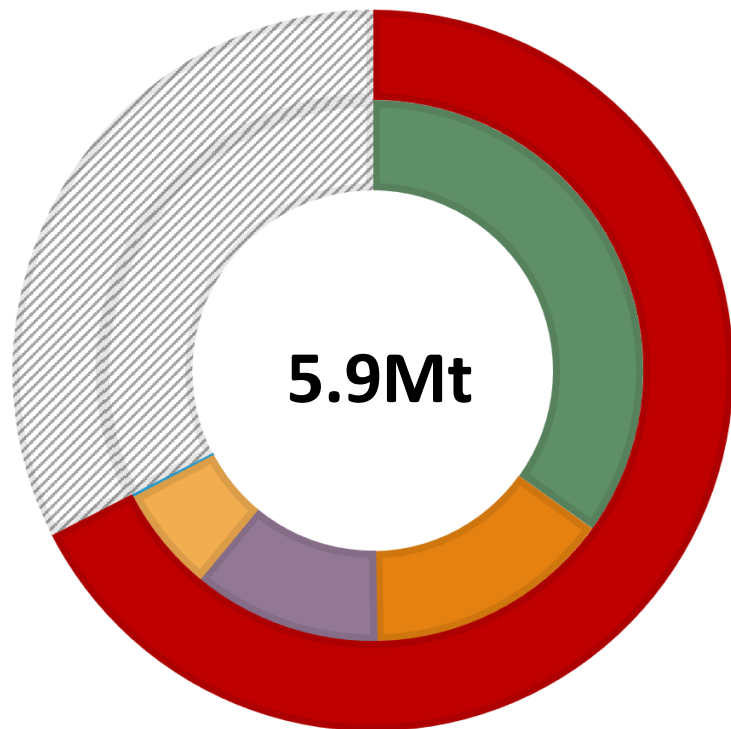
Covid-19 and its impacts on waste generation, labour and supply chains

Driver availability and port blockages leading to vulnerable supply chains

???

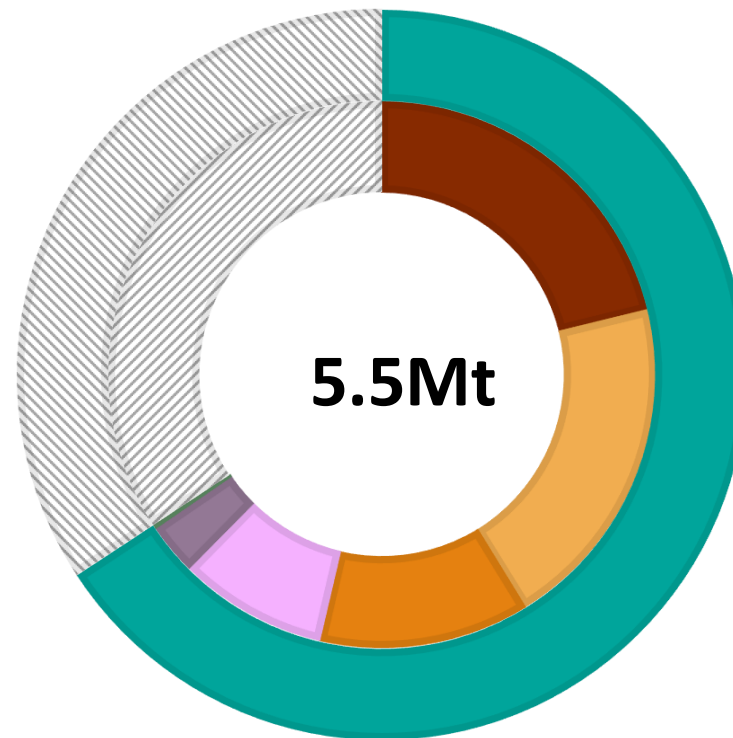
European Waste Flows

EXPORTS



- United Kingdom
- Sweden
- Norway
- All other Exports
- Germany
- Denmark
- Netherlands
- Profiled Country Exports

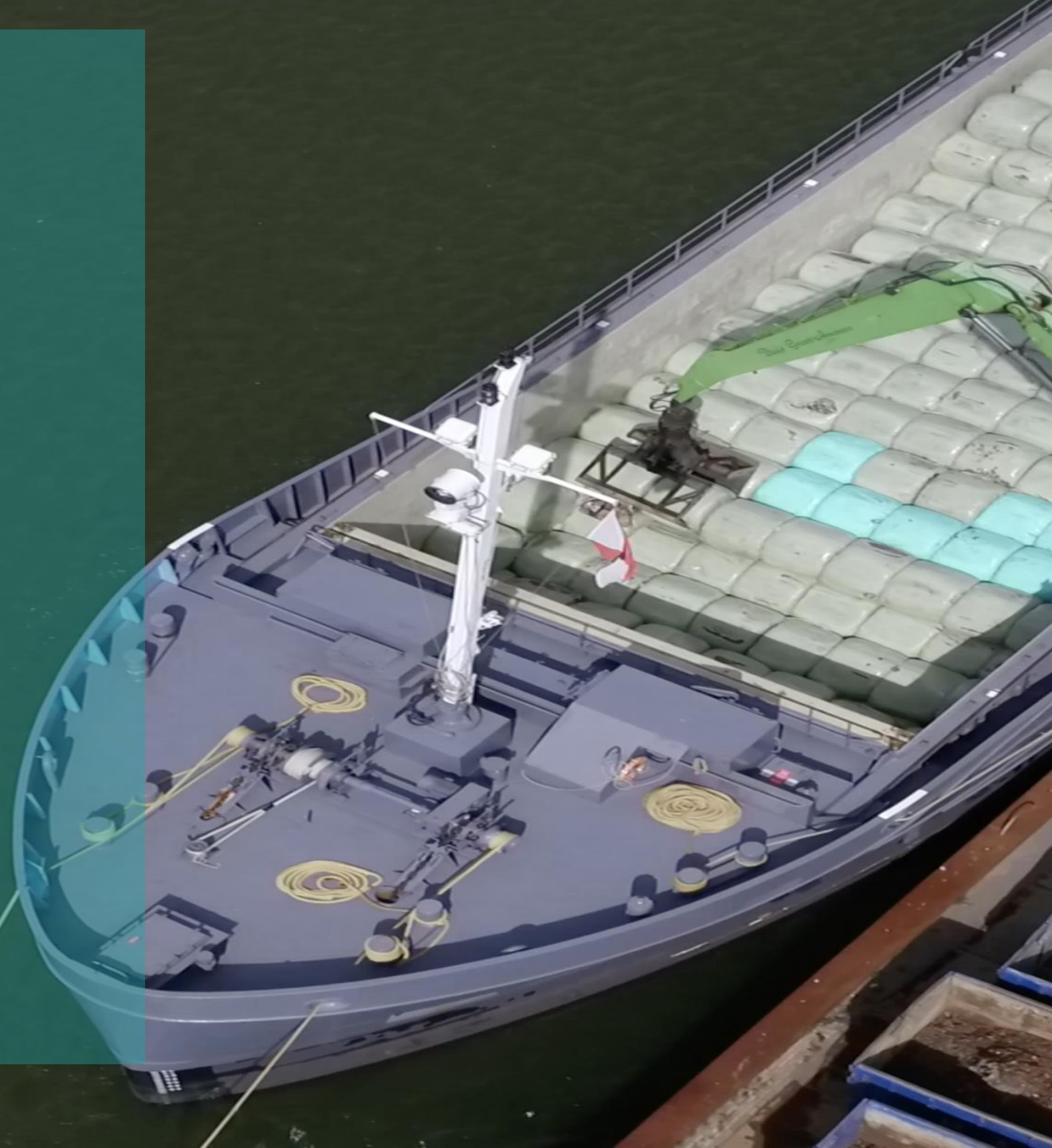
IMPORTS



- Sweden
- Norway
- Germany
- All other Imports
- Netherlands
- United Kingdom
- Denmark
- Profiled Country Imports

Selected Markets

- *Germany*
- *The Netherlands*
- *Sweden*
- *The United Kingdom*



Germany

Overview

- Large (and growing) domestic treatment capacity
- Large cement kiln industry with significant input from WDF as fuel
- Concerns regarding sufficient domestic supply

Policy Review

- European energy crisis > increased focus on domestic generation
- Inclusion in national emissions trading scheme from 2024

Germany

WDF Imports

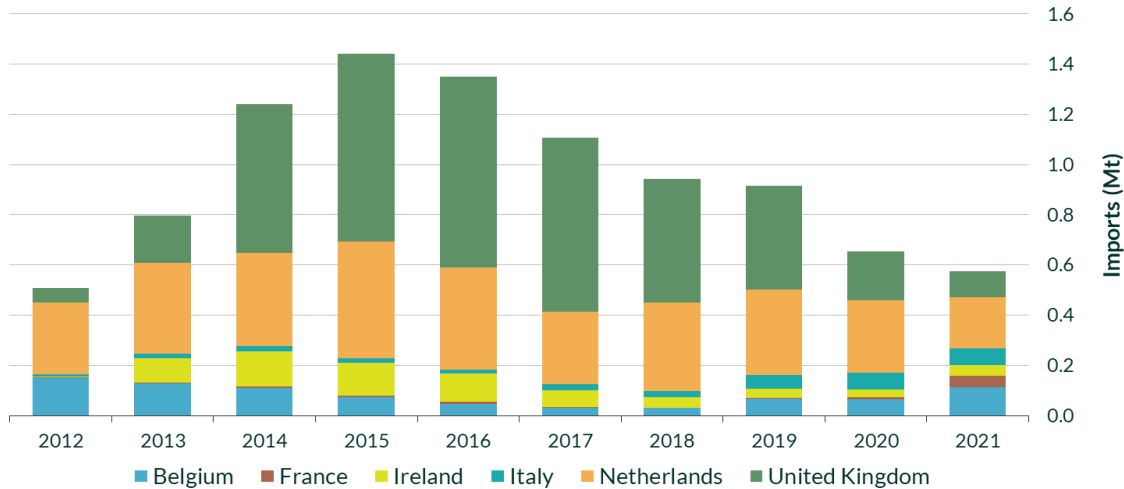


Figure 13: Waste Shipment Data (waste codes 19 12 12 and 19 12 10) – Imports into Germany. Source: Eurostat (2020), UBA (2021).^{31,32}

Import tonnages peaked in 2015 and have been declining since

Importing from the UK and Netherlands

Germany is a **net exporter** of WDF, although up to 2020 it was historically a net importer.

Exporting to the Netherlands, Denmark and Sweden

WDF Exports

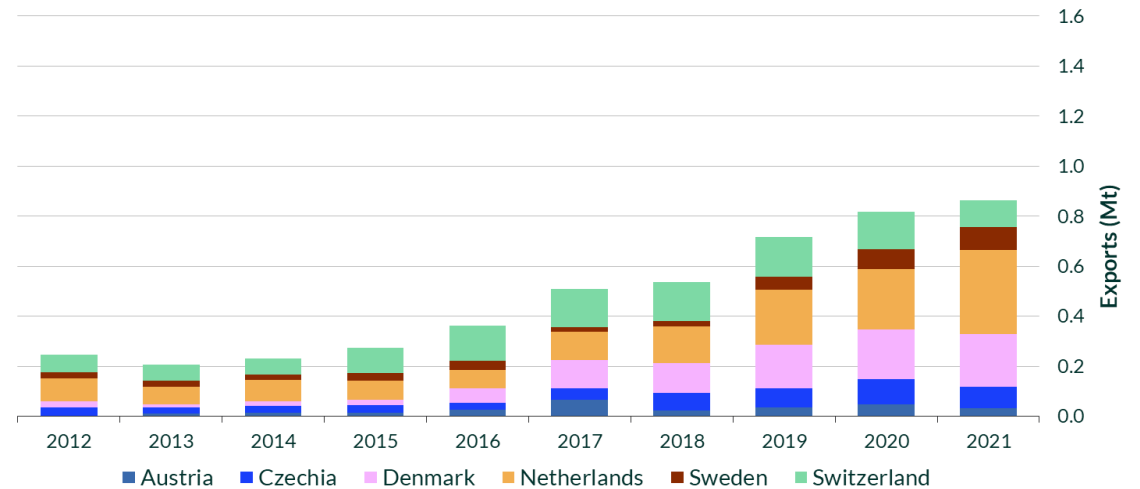


Figure 14: Waste Shipment Data (waste codes 19 12 12 and 19 12 10) – Exports from Germany. Sources: Eurostat (2020), UBA (2021).^{33,34}

The Netherlands

Overview

- Stable exports
- Surplus treatment capacity
- Ambitious climate targets

Policy Review

- Import and incineration taxes
- Significant pressure to reduce national emissions
- The success of the import tax has been questioned

The Netherlands

WDF Imports

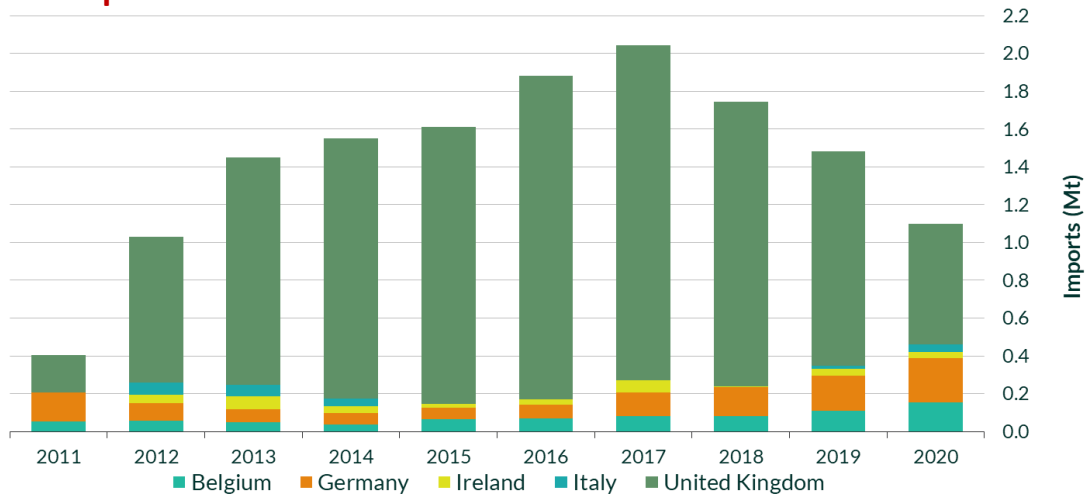


Figure 18: Waste Shipment Data (waste codes 19 12 12 and 19 12 10) – Imports into the Netherlands. Source: Eurostat (2020).⁵¹

The Netherlands is a **net importer** of WDF... imports peaked in 2017 and have declined since

The UK remains the Netherlands's top importer

Stable (small) exports from Netherlands, primarily to Germany and Sweden

WDF Exports

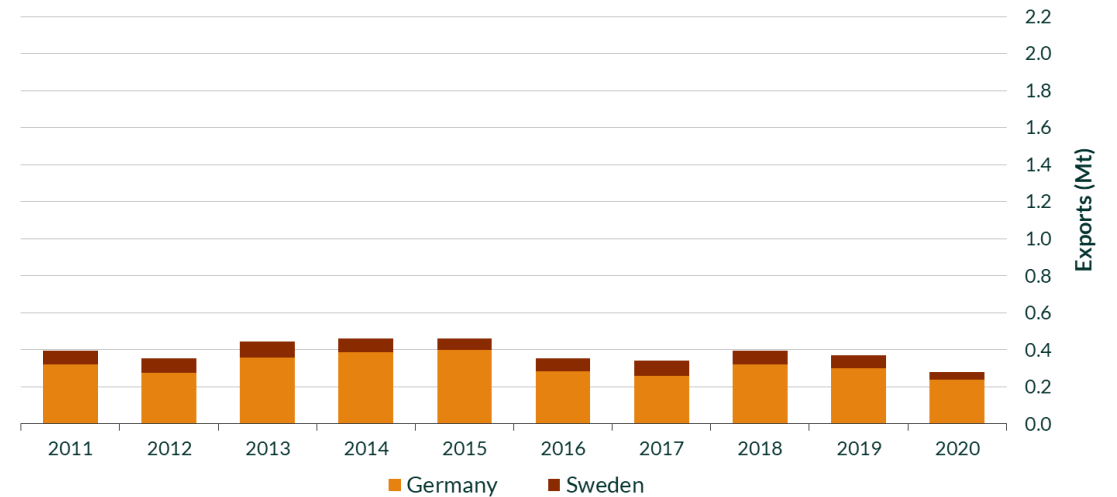


Figure 19: Waste Shipment Data (waste codes 19 12 12 and 19 12 10) – Exports from the Netherlands. Sources: Eurostat (2020).⁵²

Sweden

Overview

- Significant domestic treatment capacity
- Swedish cement kilns focus solely on WDF
- Substantial logistics impacts in vessel-dominated market

Policy Review

- Mandatory fossil-based waste incineration tax will be removed for 2023
- EfW included in national ETS

Sweden

WDF Imports

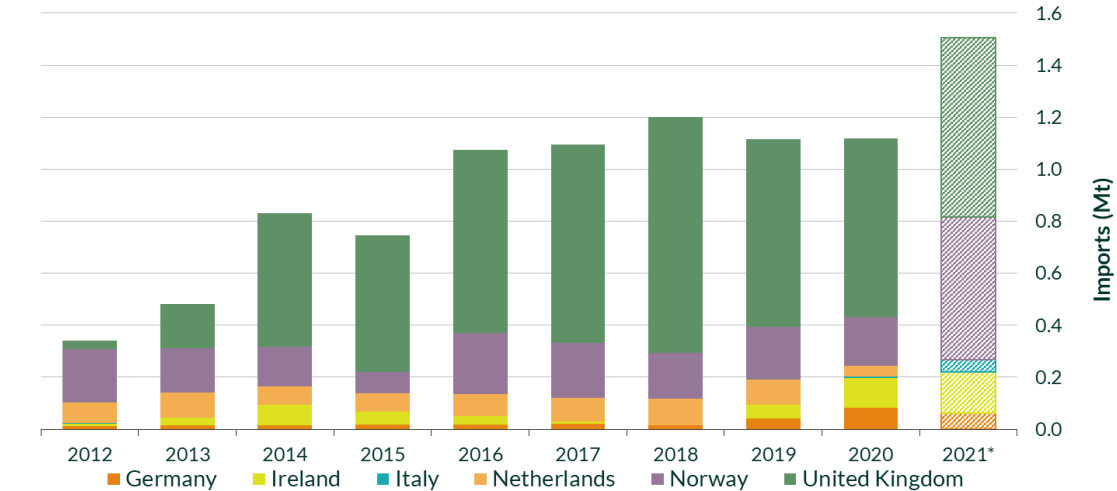


Figure 27: Waste Shipment Data (waste codes 19 12 12 and 19 12 10) – Imports into Sweden. Source: Eurostat (2020), hatched data for 2021 is provisional data sourced from industry.⁷⁰

Sweden is a **net importer** of WDF.

Imports have increased (but fluctuated) since 2012, with the input from Italy growing significantly since 2015

Exports were traditionally low but increased significantly in 2020 to Norway

WDF Exports

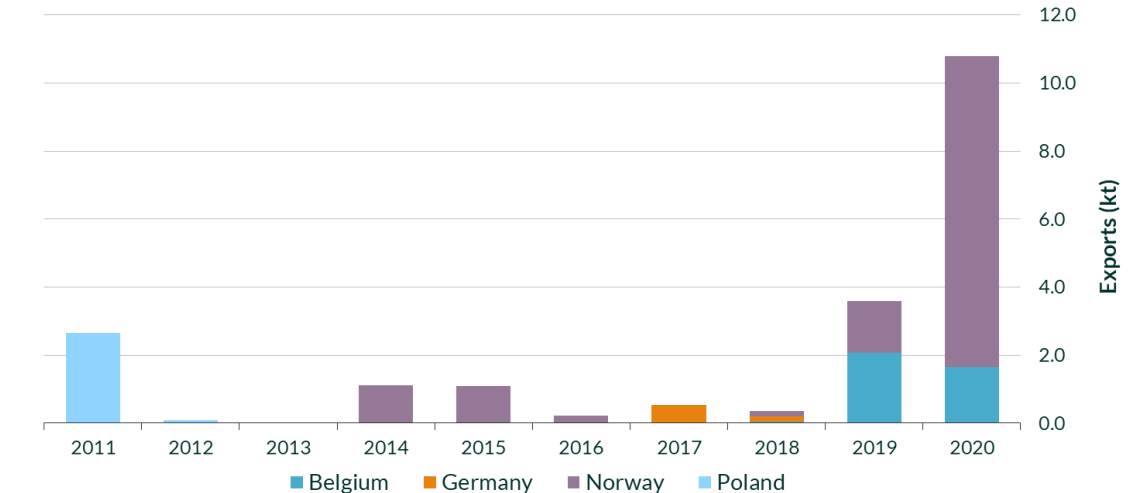


Figure 28: Waste Shipment Data (waste codes 19 12 12 and 19 12 10) – Exports from Sweden. Sources: Eurostat (2020).⁷¹

The United Kingdom

Overview

- Significant exporter since 2010
- Growing domestic treatment capacity...
- But policy restrictions on new developments in Scotland and Wales

Policy Review

- No incineration taxes
- Ongoing consultation on including EfW in the UK's ETS
- Rumours of an incineration tax
- Pressure to prohibit waste exports (based on waste crime concerns)

The United Kingdom

WDF Exports

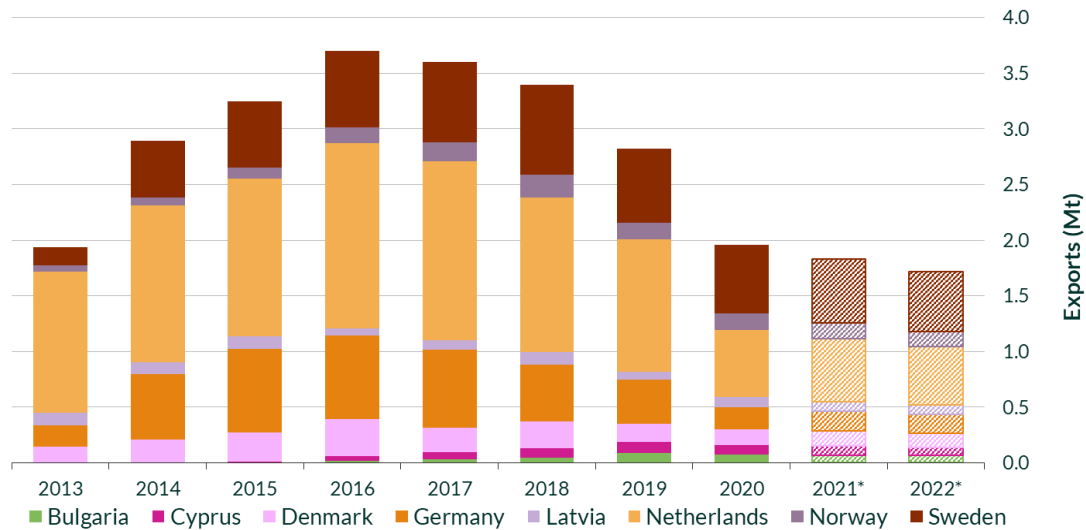
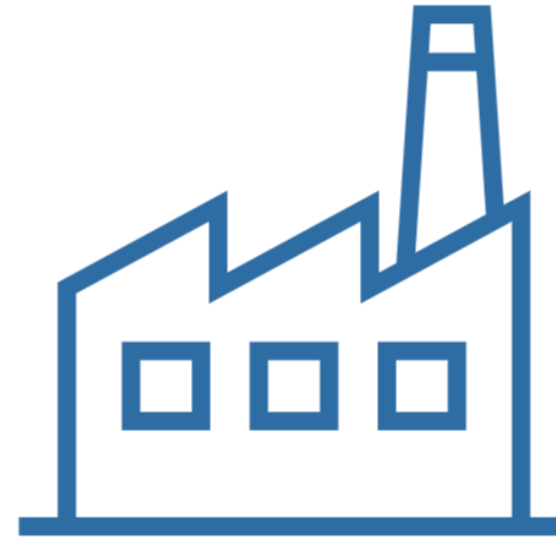


Figure 31: Waste Shipment Data (waste codes 19 12 12 and 19 12 10) – Exports from the UK. Source: Eurostat, *data for 2021 and 2022 is provisional and uses projections which are calculated based on data provided by the EA for England, SEPA for Scotland, NRW for Wales, and the NIEA for Northern Ireland.⁸¹

Exports increased from 2013 but peaked in 2016 and have fallen gradually since, with Germany, the Netherlands and Sweden as key export partners

The UK has never imported WDF as there is insufficient domestic capacity

Summary



Thank you

Q&A

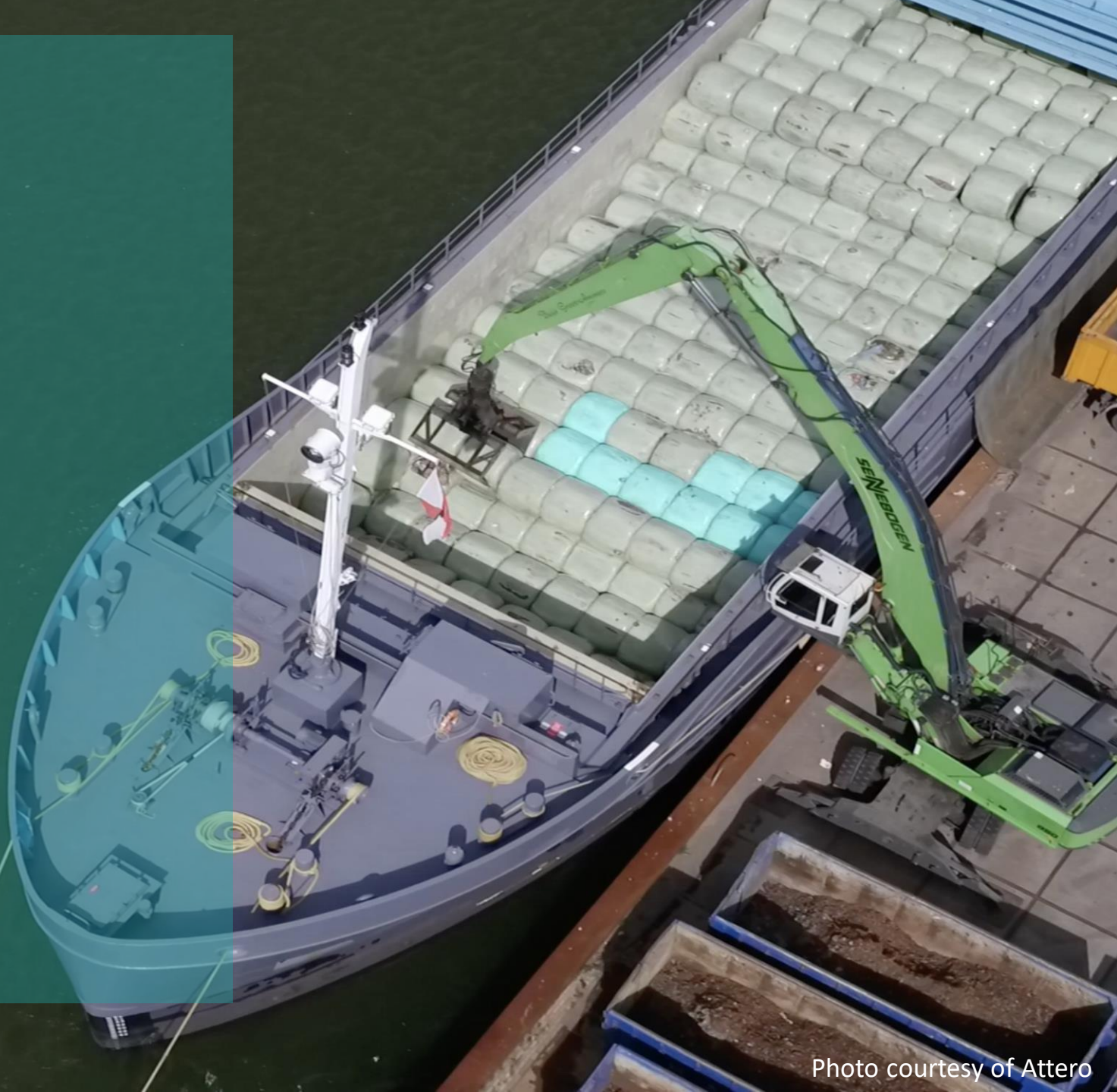


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