

Lessons from onshore wind decommissioning

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Our members make wind energy work

400+ MEMBERS

Wind turbine manufacturers

e.g.



GE Renewable Energy

SIEMENS Gamesa
RENEWABLE ENERGY

Vestas

Wind farm developers

e.g.



acciona
Energy



equinor



res
powering change



Shell

Power utilities

e.g.

RWE



EDF
renewables

enel
Green Power



VATTENFALL

Component manufacturers

e.g.

LM WIND
POWER

BASF
We create chemistry



HITACHI

ABB

Installation / logistics

e.g.



Jan De Nul
GROUP



Port of Amsterdam

Van Oord



Marine ingenuity

Financial & legal services

e.g.

Allianz

Baker
McKenzie.



Green
Investment
Group

Research institutes

e.g.

CATAPULT
Offshore Renewable Energy



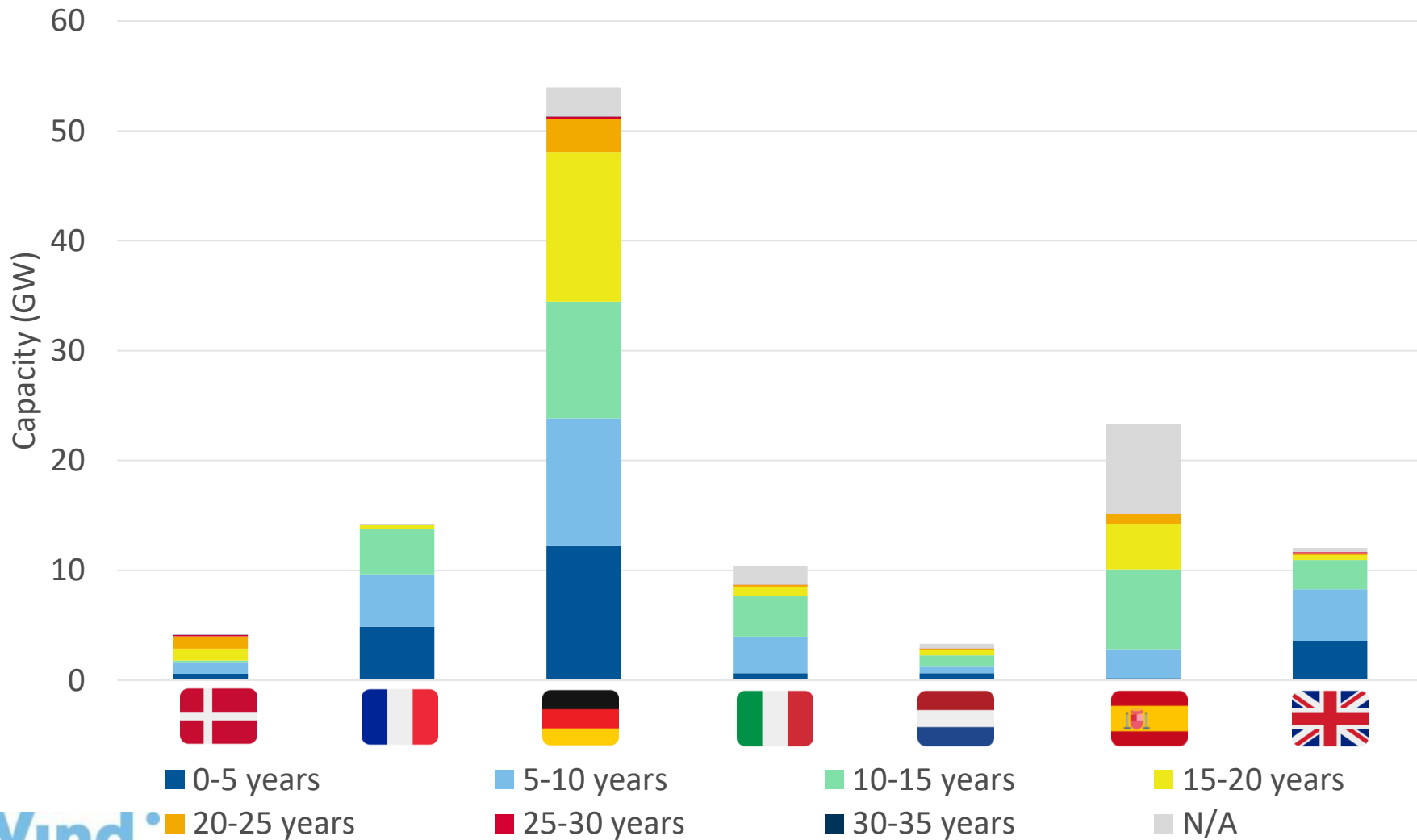
Fraunhofer
IWES

TU Delft

DTU

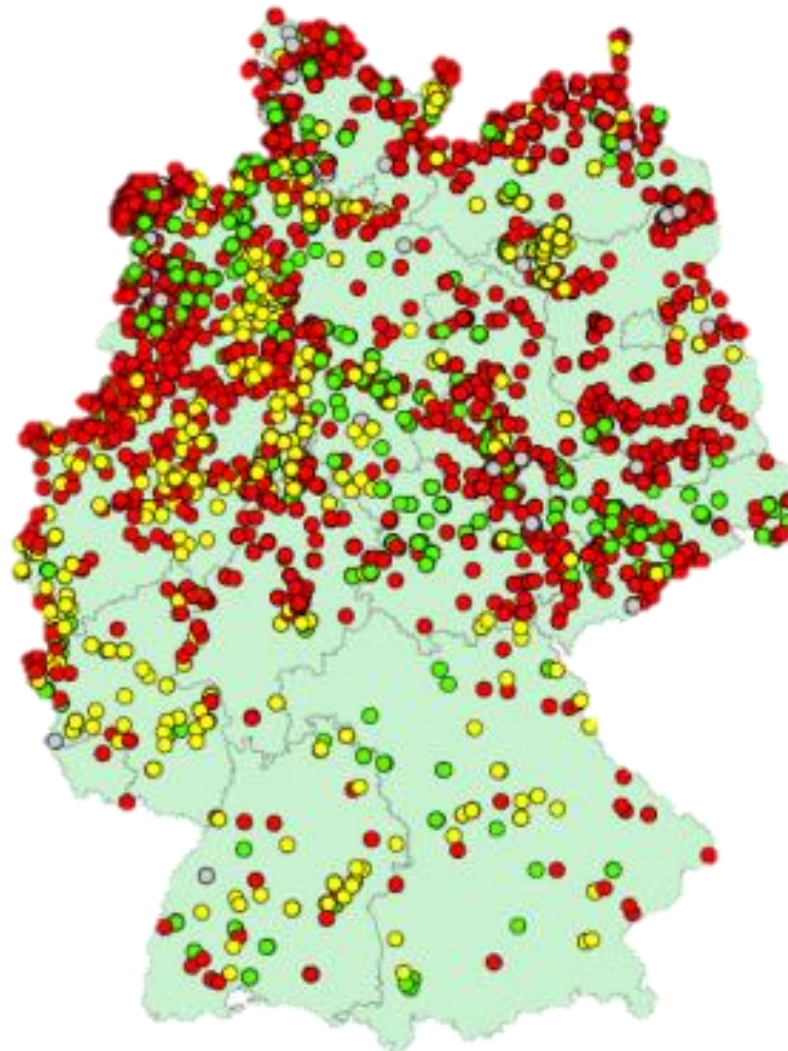
+ NATIONAL WIND ASSOCIATIONS

An aging onshore fleet: *More than 16 GW in Germany are older than 15 years*



Where it's possible to repower wind farms in Germany, September 2019

- Repowering possible
- Repowering might be possible
- Repowering not possible

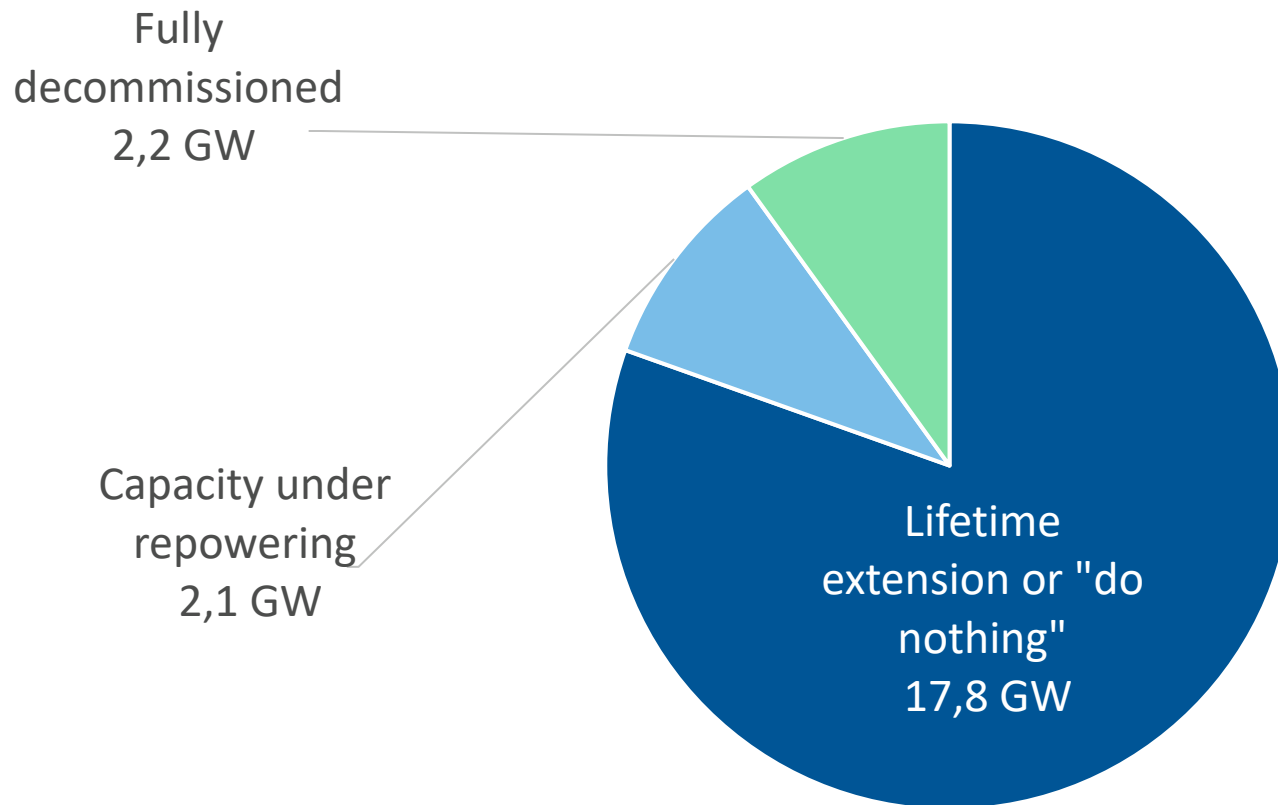


Repowering doubles a wind farm's capacity and lowers turbine numbers by a third

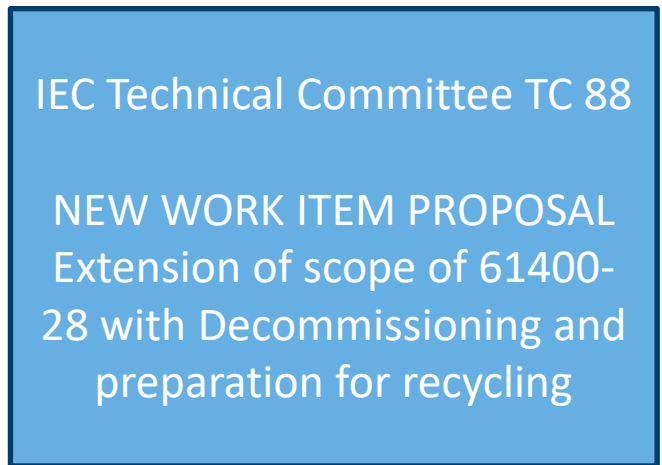
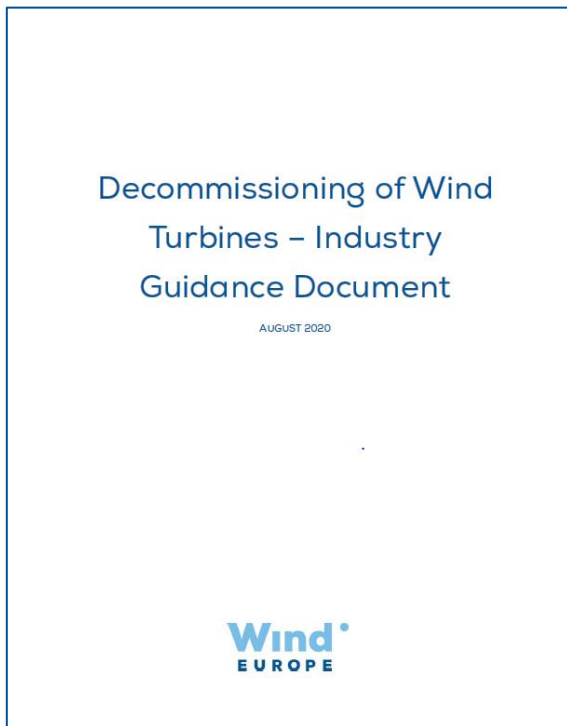


Most ageing wind farms are getting lifetime extension

22 GW approaching their economic *End of Life** in 2019-2023



Towards an international standard



Decommissioning and Dismantling Industry Guidelines

Type

Non-prescriptive
general guidance for
onshore wind

Target
audience

Decision-makers,
including asset owners,
governments and
customers

Publication

At the End of Life
Issues (EoLIS) Seminar
(18-20 Nov 2020)

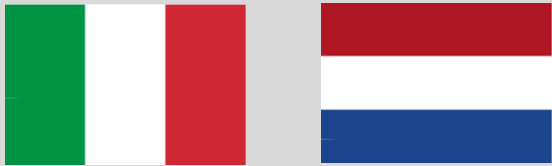
Contributors



Scope

1

Mapping of Regulations



2

Decommissioning Plan



Project Management

Description of activities

Data requirements

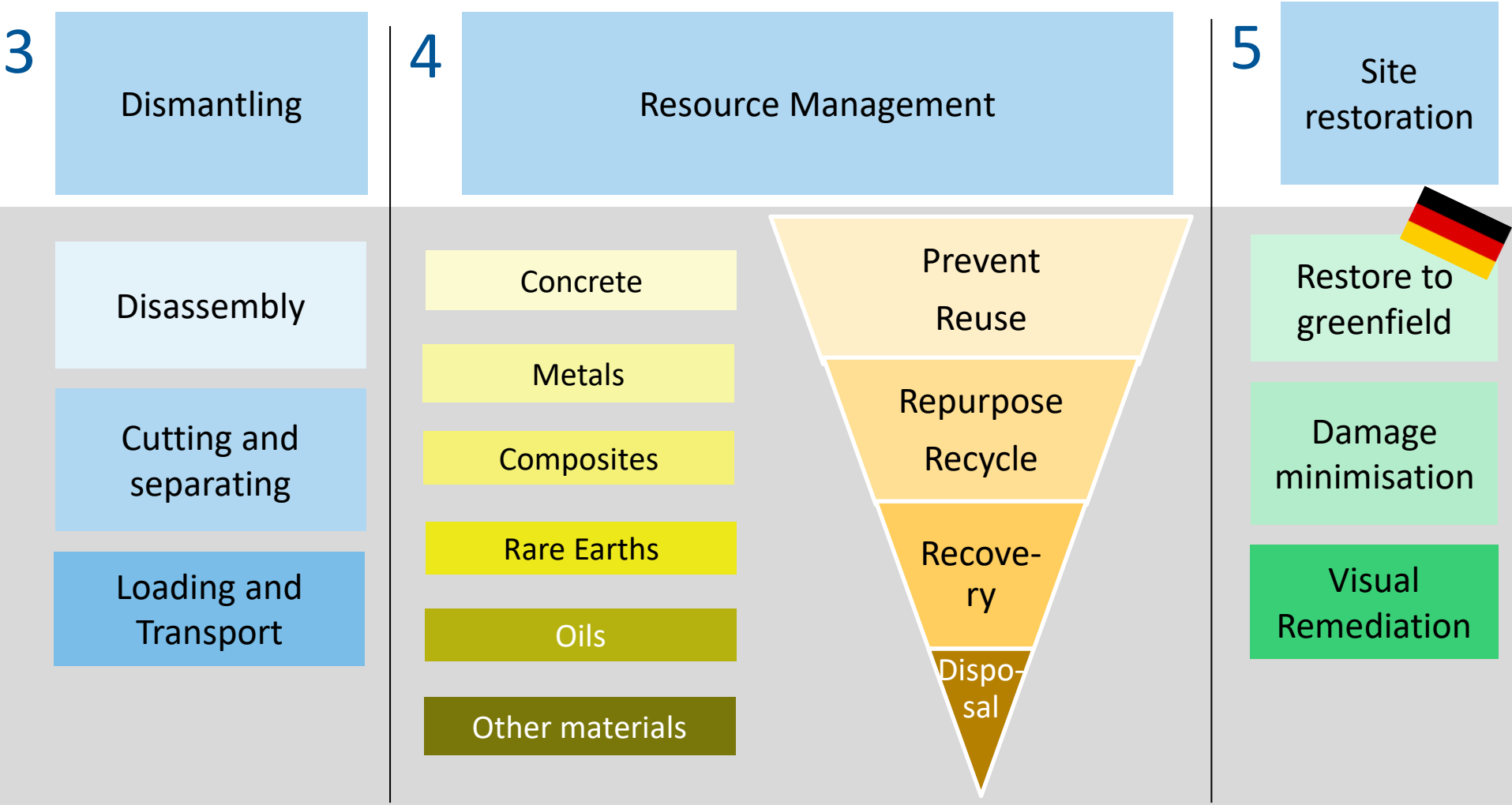
Permitting formalities

Communication Plan

Environment, Health and Safety



Scope



Key points in our guidance document

- Different rules for decommissioning and dismantling across Europe,
- a communication plan needs to involve different stakeholders,
- health and safety requirements should always be a top priority,
- the decommissioned site should be returned to a greenfield.