



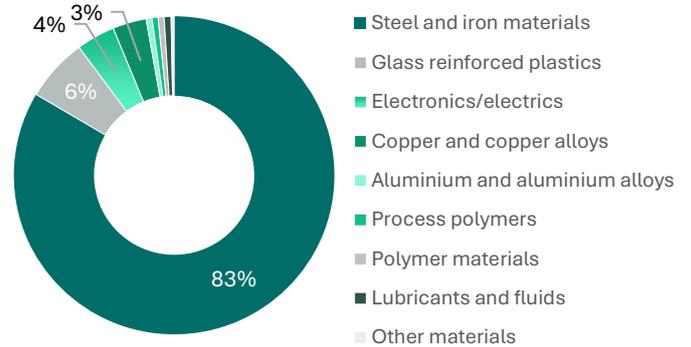
Life Cycle Assessment (LCA)

E-70 E4

Turbine Specification

Nominal power	2.30 MW
Service life	20 years
Hub height	64 metres
Wind class	I A
Annual energy production ¹	7,607 MWh
Tower type	Steel
Foundation type	Flat foundation

Material Composition ²



LCA Framework ³

Goal and Scope

Assessment of potential environmental impacts throughout the product life cycle (cradle to grave)

Functional unit

1 kWh of generated electrical energy delivered to the grid

Impact assessment method

CML, August 2016

Data sources and software

Primary data, industry-specific secondary data, LCA for Experts background data (2024.1)

No cut-off rules applied for Life Cycle Inventory

Environmental Impact Indicators

Acidification Potential, g SO ₂ -e	0.02
Global Warming Potential, g CO ₂ -e	5.68
Eutrophication Potential, mg PO ₄ -e	1.95
Photochemical Ozone Creation Potential, mg Ethene-e	1.39
Primary Energy Demand (renewable and non-renewable resources, net calorific value), MJ	0.09
Abiotic Depletion Potential (fossil), MJ	0.07

Other Environmental Indicators

Carbon footprint

376
 t CO₂-e/MW

Energy Payback Time

6.25
 months

Return on Energy

38.4
 times

Recyclability ^{2,4}

83.0
 %

1 | Site with capacity factor of 40% is assumed, including losses

2 | Turbine without foundation

3 | Principles according to ISO 14040/14044

4 | Based on industry-specific expert assessments of recycling rates