



## Milestone Summary Report: M2

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**Work Package:** WP3 - Exploitation and commercialization  
**Milestone name:** M2: Value chain demonstrated with data from Copernicus Service  
**Milestone status:** Completed

### Milestone description

#### **M2 Value chain demonstrated with data from Copernicus Global Land Service.**

The purpose of M2 is to demonstrate that activities in the InnoWind project are able to – or has the potential to - generate commercially, valuable products for the benefit of the wind energy community and for the project partners.

### Activities and tasks completed

The following activities has been completed to demonstrate the value chain based on data from the Copernicus Global Land Service. The demonstration is made primarily considering fast-track products and using existing distribution channels – such as the windPRO online services. A more generalized commercial (web-page based) distribution system for WASP and 3<sup>rd</sup> party users is scheduled for later release when datasets from the intermediate and long-term tracks materializes. Activities and data:

#### **Elevation and Land Use Data for Microscale Wind Modelling**

(may be used in windPRO, WASP and 3<sup>rd</sup> party applications):

- EU-DEM v. 1.0, see <http://help.emd.dk/mediawiki/index.php?title=EU-DEM>
- Corine 2012 (for roughness classification with lookup-table), see [http://help.emd.dk/mediawiki/index.php?title=Corine\\_2006](http://help.emd.dk/mediawiki/index.php?title=Corine_2006)
- Copernicus Global Land Cover Classification, 100m (Africa 2015 demonstration data) <http://help.emd.dk/mediawiki/index.php?title=CGLS-LC100m>

#### **Map Data for Wind Energy Prospecting (with dynamic mapping / zooming)**

- Global Satellite Imagery, 10m resolution, True Color – Based on Sentinel 2, see [http://help.emd.dk/mediawiki/index.php?title=WindPRO\\_Global\\_Satellite\\_Imagery](http://help.emd.dk/mediawiki/index.php?title=WindPRO_Global_Satellite_Imagery)
- European Satellite Imagery, 2.5m resolution (Based on Copernicus VHR-data), see [http://help.emd.dk/mediawiki/index.php?title=WindPRO\\_European\\_Satellite\\_Imagery](http://help.emd.dk/mediawiki/index.php?title=WindPRO_European_Satellite_Imagery)

#### **Demonstration: Land Use Data for Mesoscale Wind Modelling (using EMD-WRF setup)**

We have completed a successful test of EMD standard WRF mesoscale modelling setup with Copernicus (CORINE) data.

#### **Demonstration: Premium Data**

Premium data layers has been prospected during Winterwind 2018 – with data mainly based on currently available commercial sources, but also bathymetry data derived from Sentinel 2 imagery.

### Deliverables and outcomes

The M2 is sucesfully completed as it has been demonstrated that the project is able to deliver valuable land-surface data and maps into the wind-energy value chain - as well as into the modelling chain. Through our business exploitation activities, the user uptake will be monitored as more novel innowind products from the fast track, intermediate track and long-term tracks are included.