




# Harvester Season

## Summary

A service supporting the forestry sector for climate-smart operation planning.

Sponsor	Project	Solution provider
 <p>The e-shape project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 82085</p>	 <p>e-shape</p>	

## Taxonomy

- Forestry
- Land
- Forests, Environment & Climate
- Atmosphere & Climate

## User profile

Metsäteho Oy is a limited company owned by the leading forest industry organisations and companies of Finland and is specialised in research and development (R&D) work and projects.

Metsäteho supports the development of its shareholders' wood procurement and wood production operations and improves the operating preconditions for wood supply.

With this background, Metsäteho provides for Harvester Seasons contacts to leading forest companies and customers in Finland and Europe.



## Service description

Harvester Seasons, developed by the Finnish Meteorological Institute, is a web application supporting the Finnish forestry sector by offering high-resolution soil trafficability, seasonal forecast, forest fire index and carbon emission information system. Harvester Seasons has been co-designed with the stakeholders from the Finnish forestry sector and tailored especially to their needs.

The trafficability service combines ALS Airborne Laser Scanning data by Finnish Forest Centre with FMI's weather forecast as well as seasonal forecast and climatological conditions from Copernicus. The service provides information on forest fire risks. Giving guidelines to the forestry sector about the impacts of deforestation, clear-cutting and optimized forest management with respect to the forest's carbon cycle helps additionally for sustainable operation planning.

## Customer experience

**“We and our shareholders see the development of services like Harvester Seasons as crucial in optimizing resource efficiency while minimizing environmental impacts of harvesting operations.”**



## Need

Forest operation planning service on trafficability and forest information based on hydrological, seasonal and weather forecast models.

## Challenges

- to develop an easily accessible service, which is tailored to the user's needs
- to downscale seasonal long-term forecasts towards a dedicated trafficability service

## Results

- to forecast trafficability based on frozen soil depth and soil moisture from Copernicus C3S seasonal predictions
- to raise awareness and train foresters regarding their carbon footprint and motivate them to adopt low carbon, climate-smart harvesting

## References

Learn more about the service: <https://harvesterseasons.com/>

Learn more about e-shape: [www.e-shape.eu](http://www.e-shape.eu)

A question? Contact the Helpdesk: <https://helpdesk.e-shape.eu>