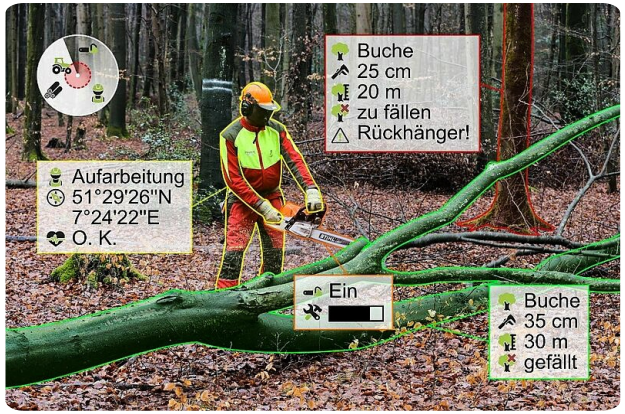
KWH4.0 | Center of Excellence for Forestry 4.0



Forest and Wood 4.0 - the forest cluster becomes smart

The Center of Excellence for Forestry 4.0 is developing Industry 4.0 digitalization concepts for the forest and wood cluster. The driving force behind this approach is a closely cooperating working group of companies, research centers and the Forestry Education Center North-Rhine Westphalia as a practical testbed.New, intelligent and decentrally acting machines, devices, services and people, will enable the cluster to optimize its complex value-added networks, develop new business models and meet current challenges from ecology, economy and climate change. Existing approaches address the complexity of structures and processes, and the conflicting demands on forest management only insufficiently. To "smartify" the forest and wood cluster, existing competencies from industry, science and administration must be bundled: The goal of KWH4.0 is to create a know-how base and infrastructures, and to implement forest and wood 4.0 components via innovative Smart Forest Labs. The Smart Forest Labs serve as experimental forestry laboratories in which developed components, systems and processes are tested, standardization advanced, concepts disseminated, and actors trained. Developed concepts and standards are continuously published as practical recommendations, a first version of the communication infrastructure S3I (Internet of Things application) has been established. In addition, there is an increasingly smart fleet: forestry machines have been upgraded to retrieve digital information (GPS position, fuel consumption, production data, etc.) and at the same time networked via alternative radio standards with machines in regions where mobile communication is not possible.

DETALJER

OPPRINNELSE FOR TRE

--

TYPE TRE

--

TYPE TRE INVOLVERT

--

PåVIRKNING På MILJø OG BIOLOGISK MANGFOLD

Other solutions from the KWH4.0 network address sensor-supported forest monitoring in order to increase resilience against climate change.

INNTEKTSEFFEKT

--

UTNYTTELSESPOTENSIAL

--

HUB

Central-West Hub

ØKONOMISK PåVIRKNING

--

MOBILISERINGSPOTENSIAL

High, the KWH4.0 as a competence hub supports a wide range of projects and digital solutions, which in turn support wood mobilization.

BæREKRAFTPOTENSIAL - VERDI

Veldig positivt

ENKEL IMPLEMENTERING

The KWH4.0 has received ERDF funding to start working. A challenge can be the core collaboration from both sides, forestry and ICT, needed to kick off activities.

ENKEL IMPLEMENTERING - EVALUERING

--

VIKTIGE FORUTSETNINGER

--

TYPE BEGIVENHET DER DENNE BPI HAR BLITT OMTALT

Studiebesøk (T2.3)

EFFEKT På ARBEIDSPLASSER

--

KOSTNADER MED IMPLEMENTERING (EURO - €)

--

SPESIFIKKE KUNNSKAPSBEHOV

--

MER INFORMASJON

UTFORDRING ADRESSERT

5. Forbedre den økonomiske og miljømessige ytelsen i skogbrukets forsynings kjede

DOMENE

Innovasjonsledelse, digitale knutepunkter, klynger

TYPE LØSNING

Modellering, DSS, simulering, optimalisering

NØKKELORD

--

DIGITAL LØSNING

Ja

INNOVASJON

Ja

OPPRINELSESLAND

Tyskland

POTENSIALE

Regional/deler av landet

START OG SLUTT åR

--

KONTAKT INFORMASJON

EIER ELLER FORFATTER

RIF Institut für Forschung und Transfer e.V.

Frank Heinze

info@kwh40.de

RAPPORTØR

FBZ

Marie-Charlotte Hoffmann, Elke Hübner-Tennhoff

marie-charlotte.hoffmann@wald-und-holz.nrw.de

REFERENCES AND RESOURCES

HJEMMESIDE (HOVEDSIDE)

https://www.kwh40.de/

PROSJEKTETS HJEMMESIDE

--

REFERANSE TIL PROSJEKT

--

RESSURSER

--

LOGO FOR BESTE PRAKSIS

LOGO FOR HOVEDORGANISASJON

PROSJEKT SOM DETTE FAKTAARKET ER OPPRETTET UNDER

Rosewood 4.0

INNLEGGSDATO

11 aug 2021

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY