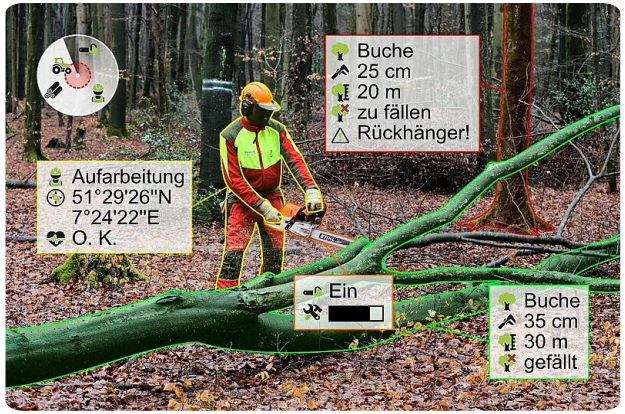
KWH4.0 | Center of Excellence for Forestry 4.0



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

VEDENS URSPRUNG

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TRäTYP

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TYP AV TRä

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PåVERKAN På MILJö & BIOLOGISK MåNGFALD

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

EKONOMISK EFFEKT

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KOMMERSIELL POTENTIAL

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NAV

Centrala och västra navet

EKONOMISK PåVERKAN

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MOBILISERINGSPOTENTIAL

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

HåLLBARHETS POTENTIAL - VäRDE

Mycket positiv

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 - UTVäRDERING

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NYCKEL FöRUTSäTTNINGAR

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TYP AV EVENEMANG DäR DENNA BPI HAR PRESENTERATS

Studiebesök (T2.3)

EFFEKT ANTAL ANSTäLLDA

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KOSTNADER FöR IMPLEMENTERING (EURO - €)

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SPECIFIKA KUNSKAPSBEHOV

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MER INFORMATION

UTMANING SOM ADRESSERAS

5. Förbättra ekonomisk och miljömässig prestanda för skogsförsörjningskedjor

DOMäN

Innovasions ledning, digitala hubbar, kluster

TYPE AV LöSNING

Modellering, DSS, simulering, optimering

NYCKELORD

--

DIGITAL LöSNING

Ja

INNOVASION

Ja

UPPHOVSLAND

Tyskland

POTENTIAL

Regional/landsdel

START OCH SLUTåR

--

KONTAKT INFORMASION

ÄGARE ELLER FöRFATTARE

RIF Institut für Forschung und Transfer e.V.

Frank Heinze

info@kwh40.de

RAPPORTöR

FBZ

Marie-Charlotte Hoffmann, Elke Hübner-Tennhoff

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

REFERENCES AND RESOURCES

HEMSIDA (HUVUDSIDA)

https://www.kwh40.de/

PROJEKTETS HEMSIDA

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PROJEKTREFERENS

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RESURSER

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LOGO FöR BEST PRACTICE

KWH 4.0

LOGO, HUVUDORGANISATION

PROJEKT SOM DETTA FACTSHEET SKAPATS INOM

Rosewood 4.0

DATUM FöR INLäGG

11 aug 2021

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY