



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.

DETALJI

PODRIJETLO DRVA

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VRSTA DRVA

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ODGOVARAJUĆA VRSTA DRVA

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UTJECAJ NA OKOLIŠ I BIORAZNOLIKOST

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

UČINAK NA PRIHOD

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POTENCIJAL ISKORISTIVOSTI

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SREDIŠTE

Centralno-zapadno čvorište

GOSPODARSKI UČINAK

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POTENCIJAL ZA POVEĆANJE UPORABE DRVA

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

POTENCIJAL ODRŽIVOSTI - VRIJEDNOST

Vrlo pozitivno

JEDNOSTAVNOST PROVEDBE

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.

JEDNOSTAVNOST PROVEDBE - EVALUACIJA

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KLJUČNI PREDUVJETI

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VRSTA DOGAĐAJA NA KOJEM JE PRIKAZAN OVAJ BPI

Studijski posjet (T2.3)

UČINAK NA ZAPOŠLJIVOST

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TROŠKOVI PROVEDBE (EURO - €)

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POTREBNA POSEBNA ZNANJA

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VIŠE DETALJA

IZAZOV

5. Unaprjeđenje učinkovitosti lanca opskrbe šumom na gospodarstvo i okoliš

KLJUČNE RIJEČI

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ZEMLJA PODRIJETLA

Njemačka

DOMENA

Upravljanje inovacijama, digitalni centri, klasteri, eksploatacija (transverzalno)

DIGITALNO RJEŠENJE

Da

PODRUČJE PRIMJENE

Regionalno / podnacionalno

VRSTA RJEŠENJA

Modeliranje, sustav za podršku odlučivanju, simulacija, optimizacija

INOVACIJA

Da

POČETAK I KRAJ GODINE

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KONTAKT PODATCI

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IZVJESTITELJ

FBZ

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REFERENCES AND RESOURCES

GLAVNA WEB STRANICA

<https://www.kwh40.de/>

WEB STRANICA PROJEKTA

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REFERENCA PROJEKTA

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IZVORI

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PROJEKT U OKVIRU KOJEG JE INFORMATIVNI LIST KREIRAN

Rosewood 4.0

DATUM UNOSA

11 kol 2021



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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

