Ash as construction material in forest road maintenance



The ashes can be used in a road building among gravel. The use of ash from neighboring heat plants reduces the use of natural aggregates. The use of ash in the construction of the road has been limited, as it is currently subject to environmental permits.
In the forest and energy industries, burning wood produces a lot of ash, which is placed in landfills. The forest industry alone generates more than 300 000 tonnes of exploeable ash every year. The increase in wood energy increases the amount of ash even further. Current measures to benefit from the use of ash do not correspond to the principles of sustainable consumption and production. It would be essential to influence the legislation in order to ease the utilization of ash. It is important to perform carrying capacity measurements and research and test different mixtures of gravel and ash. The environmental issues need to be surveyed.

In Finland there are 135 000 km of forest roads where maintenance is necessary for wood procurement. According to the National Forest Programme 2015, forest car roads should be upgraded to 4 000 km annually. In the construction of roads, cost-effectiveness is most essential. The biggest challenge in most cases is the availability of affordable gravel or crushing near the forest road project. Utilization of ash as material for road construction and maintenance has produced excellent results in terms of both the technical suitability and the environmental impact.

DETALJI

PODRIJETLO DRVA

Šuma

VRSTA DRVA

Deblo

ODGOVARAJUĆA VRSTA DRVA

Stemwood, energy wood

UTJECAJ NA OKOLIŠ I BIORAZNOLIKOST

Positive: less waste from production side streams

UČINAK NA PRIHOD

Positive

POTENCIJAL ISKORISTIVOSTI

--

SREDIŠTE

Sjeverno središte

GOSPODARSKI UČINAK

Positive

POTREBNA POSEBNA ZNANJA

Knowledge, research and testing of special mixtures

POTENCIJAL ZA POVEĆANJE UPORABE DRVA

Not possibile to assess

POTENCIJAL ODRŽIVOSTI - VRIJEDNOST

--

JEDNOSTAVNOST PROVEDBE

Easy

JEDNOSTAVNOST PROVEDBE - EVALUACIJA

--

KLJUČNI PREDUVJETI

Information about side streams from mines and forest industry

Information about usability of side streams in road infrastructure

VRSTA DOGAĐAJA NA KOJEM JE PRIKAZAN OVAJ BPI

--

UČINAK NA ZAPOŠLJIVOST

New business from utilization of side streams and waste

TROŠKOVI PROVEDBE (EURO - €)

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VIŠE DETALJA

IZAZOV

2. Unaprjeđenje infrastrukture i kapaciteta javnih dionika

DOMENA

Sječa, infrastrutura, logistika

Industrije utemeljene na šumama, bio / kružna ekonomija

Drvna energetska industrija

VRSTA RJEŠENJA

Kružno, bio-bazirani proizvodi

KLJUČNE RIJEČI

--

DIGITALNO RJEŠENJE

Ne

INOVACIJA

Da

ZEMLJA PODRIJETLA

Finska

PODRUČJE PRIMJENE

Lokalna

POČETAK I KRAJ GODINE

--

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https://tapio.fi/briefly-in-english/

IZVJESTITELJ

REFERENCES AND RESOURCES

GLAVNA WEB STRANICA

https://tapio.fi/projektit/arvo-tuhka-hanke-tuhkan-maarakentamisen-uudet-arvoketjut/

IZVORI

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WEB STRANICA PROJEKTA

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REFERENCA PROJEKTA

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PROJEKT U OKVIRU KOJEG JE INFORMATIVNI LIST KREIRAN

Rosewood

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