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.

DETALJER

VEDENS URSPRUNG

Skog

TRäTYP

Rundvirke

TYP AV TRä

Stemwood, energy wood

PåVERKAN På MILJö & BIOLOGISK MåNGFALD

Positive: less waste from production side streams

EKONOMISK EFFEKT

Positive

KOMMERSIELL POTENTIAL

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NAV

Norra navet

EKONOMISK PåVERKAN

Positive

SPECIFIKA KUNSKAPSBEHOV

Knowledge, research and testing of special mixtures

MOBILISERINGSPOTENTIAL

Not possibile to assess

HåLLBARHETS POTENTIAL - VäRDE

--

ENKEL IMPLEMENTERING

Easy

ENKEL IMPLEMENTERING - UTVäRDERING

--

NYCKEL FöRUTSäTTNINGAR

Information about side streams from mines and forest industry

Information about usability of side streams in road infrastructure

TYP AV EVENEMANG DäR DENNA BPI HAR PRESENTERATS

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EFFEKT ANTAL ANSTäLLDA

New business from utilization of side streams and waste

KOSTNADER FöR IMPLEMENTERING (EURO - €)

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MER INFORMATION

UTMANING SOM ADRESSERAS

2. Förbättra infrastruktur och kapacitet hos offentliga aktörer

DOMäN

Avverkning, infrastruktur, logistik

Skogindustri, bio/cirkulär ekonomi

Industri för skogsbaserad bioenergi

TYPE AV LöSNING

Cirkulära, biobaserade produkter

NYCKELORD

--

DIGITAL LöSNING

Nej

INNOVASION

Ja

UPPHOVSLAND

Finland

POTENTIAL

Lokal

START OCH SLUTåR

--

KONTAKT INFORMASION

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

RAPPORTöR

REFERENCES AND RESOURCES

HEMSIDA (HUVUDSIDA)

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

RESURSER

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PROJEKTETS HEMSIDA

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PROJEKTREFERENS

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PROJEKT SOM DETTA FACTSHEET SKAPATS INOM

Rosewood

DATUM FöR INLäGG

17 sep 2019

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY