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.

PODROBNOSTI

PôVOD DREVA

Les

DRUH DREVA

Kmeňové drevo

UVAžOVANý DRUH DREVA

Stemwood, energy wood

VPLYV NA žIVOTNé PROSTREDIE A BIODIVERZITU

Positive: less waste from production side streams

DOPAD NA PRíJMY

Positive

POTENCIáL VYUžITIA

--

ROZBOčOVAč

Severný uzol

EKONOMICKý VPLYV

Positive

POTREBA šPECIFICKýCH ZNALOSTí

Knowledge, research and testing of special mixtures

MOBILZAčNý POTENCIáL

Not possibile to assess

POTENCIáL UDRžATEľNOSTI - HODNOTA

--

UľAHčENIE IMPLMENTáCIE

Easy

UľAHčENIE IMPLMENTáCIE - HODNOTENIE

--

KľúčOVé PREPOKLADY

Information about side streams from mines and forest industry

Information about usability of side streams in road infrastructure

TYP PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANý

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DOPAD NA ZAMESTNANOSť

New business from utilization of side streams and waste

NáKLADY NA IMPLEMENTáCIU (EURO - €)

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VIAC INFORMáCIí

RIEšENá VýZVA

2. Zlepšiť infraštruktúru a kapacity verejných aktérov

DOMAIN

Ťažba, infraštruktúra, logistika

Na lese založené priemyselné odvetvia, bio/obehová ekonomika

Výrobcovia energie z dreva

TYP RIEšENIA

Obehové, bioprodukty

Kľúčové SLOVá

--

DIGITALNE RIEšENIE

Nie

INOVáCIE

Áno

KRAJINA PôVODU

Fínsko

ROZSAH APLIKáCIE

Local

ZAČIATOK A KONIEC ROKA

--

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

REPORTéR

REFERENCES AND RESOURCES

HLAVNá WEBSTRáNKA

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

ZDROJE

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PROJEKTOVá WEBSTRáNKA

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REFERENCIA PROJEKTU

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PROJEKT, V RáMCI KTORéHO BOL TENTO INFORMAčNý PREHľAD VYTVORENý

Rosewood

DáTUM ODOSLANIA

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY