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

IZVOR LESA

Gozd

TIP LESA

Okrogli les

VRSTA OBRAVNAVANEGA LESA

Stemwood, energy wood

VPLIV NA OKOLJE IN BIODIVERZITETO

Positive: less waste from production side streams

VPLIV NA PRIHODKE

Positive

POTENCIAL IZKORIŠČANJA

--

VOZLIŠČE

Severno vozlišče

GOSPODARSKI VPLIV

Positive

POTREBNO SPECIFIČNO ZNANJE

Knowledge, research and testing of special mixtures

POTENCIAL ZA MOBILIZACIJO

Not possibile to assess

TRAJNOST - VREDNOST

--

ENOSTAVNOST IZVEDBE

Easy

ENOSTAVNOST IZVEDBE - OCENJEVANJE

--

KLJUČNI PREDPOGOJI

Information about side streams from mines and forest industry

Information about usability of side streams in road infrastructure

VRSTA DOGODKA, NA KATEREM JE BIL PREDSTAVLJEN TA BPI

--

VPLIV NA DELOVNA MESTA

New business from utilization of side streams and waste

STROŠKI IZVEDBE (EURO - €)

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VEČ PODROBNOSTI

IZZIV

2. Izboljšava infrastrukture in kapacitet deležnikov

DOMENA

Sečnja in spravilo, infrastruktura, logistika

Gozdno-lesna industrija, krožno gospodarstvo

Lesna biomasa

TIP REŠITVE

Bio-osnovani izdelki

KLJUČNE BESEDE

--

DIGITALNE REŠITVE

No

INOVACIJA

Da

IZVORNA DRŽAVA

Finska

OBSEG UPORABE

Lokalni

ZAČETNO IN KONČNO LETO

--

KONTAKTN PODATKI

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

POROČEVALEC

REFERENCES AND RESOURCES

SPLETNA STRAN

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

VIRI

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SPLETNA STRAN PROJEKTA

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REFERENCA PROJEKTA

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PROJEKT, V OKVIRU KATEREGA SO BILI ZBRANI OSNOVNI PODATKI

Rosewood

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