

Estonian Recycling Cluster – driving force for recycling

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What is a cluster?

- Driving force

Co-operation between the companies of the same and different sectors and research & educational institutions

- The objectives of the cluster

- To increase the added value of the companies

- To increase the sales of the products-services and export.

ESTONIAN RECYCLING CLUSTER

Cluster development

1. Dec, 2009 – Nov, 2010

Preliminary projects – Compost production and production of recycled aggregates from C&D waste.

2. Jan.01, 2011 – Dec.31, 2013

Estonian Recycling Cluster



Estonian Recycling Competence Center

Co-financed by the European Regional Development Fund through Enterprise Estonia.

Activities of Estonian Recycling Competence Center

Projects

Estonian Recycling
Cluster

Nordic Cooperation
– Estonia, Finland,
Norway , Sweden

Baltic Sea Region
SIMM-CENTER
CLUSTER

Trainings

Trainings for emplo-
yees of recycling
companies

Trainings for local
authorities

International
trainings

Certification

Certification of
recycled materials

Project partners

1. 16 companies - 14 waste recycling companies, road construction company and cement company.
2. Estonian Water Works Association
3. 3 research and educational institutions
 - *Estonian University of Life Sciences – quality and use of compost*
 - *Tallinn Technical University - long lasting experiences in testing road construction materials and technologies*
 - *Central Estonian Education and Competence Center*
4. Leading partner – Estonian Recycling Competence Center

Waste to products

Compost

Sewage sludge

Recovered fuels

Ashes

Recycled aggregates

Estonian Recycling Cluster

RECYCELED AGGREGATES

Construction & Demolition Waste

- Quarries in Tallinn and in its surroundings are in 5-6 years perspective empty, difficulties in opening new quarries.
- Solution - > use of recycled aggregates.
 - Concrete
 - Asphalt concrete
 - Soil and stones
- Recycled aggregates in road construction works -> high quality standards and certified products.

Certified materials



V-P08/1

EC TOOTMISOHJE SERTIFIKAAT

2325-CPD-0038

Kooskõlas EÜ Nõukogu direktiiviga 89/106/EMÜ 21.detsembrist 1988.a liikmesriikide ehitustooteid käsitlevate seaduste, määruste ja haldusnormide ühtlustamisest (ehitustoodete direktiiv e CPD) koos hilisema muudatusega, on kindlaks tehtud, et ehitustoode

taaskasutatav täitematerjal, purustatud raudbetoon

fraktsioonid: 0/16, 0/32, 0/63, 16/32, 32/63

kasutamiseks vastavalt:

EVS-EN 13242:2006+A1:2008, hüdrauliliselt seotud ja sidumata kihtide täitematerjalina,

mille on turule toonud

ATI Grupp OÜ

registrikood 10508923, Peterburi tee 94, 11415 Tallinn

Construction of a test road, 2011

- In co-operation with Estonian Road Authority
- 425m in length
- Used material – Crushed concrete 0/32 mm
- Monitored by Tallinn Technical University



Construction of the test road, Oct. 11



Test road today



Test Road Monitoring

1. Bearing capacity measurements
2. Installation of Percostation in June 2012

Percostation is a system for continuous monitoring of dielectric constant, electrical conductivity and temperature of materials.



Conference in Tallinn, Oct. 9.-10, 2014

The aim of the conference:

1. Promote reuse and recycling of construction and demolition waste
2. Promote use of recycled aggregates – road construction companies, state authorities, local authorities
3. Exchange knowledge and practical experiences – speakers from Finland, Norway and Austria.

Organizers:

Estonian Recycling Competence Center/ Estonian Recycling Cluster

Estonian Asphalt Pavement Association/Estonian Road Cluster

Estonian Recycling Cluster

TRAINING PROGRAM

Training program

1. Representatives of project partners/companies
2. Ministry of the Environment
3. Environmental Board
4. Environmental Inspectorate
5. Estonian University of Life Sciences
6. Tallinn Technical University
7. Central Estonian Education and Competence Center

Length – 8 month, 2 days training every month.

Lectures and company visits.

Training program

1. Waste management in general. Legal acts. Permits and licenses. Control.
2. Municipal waste management. Organised municipal waste collection. Separate collection of waste. Sorting and recycling.
3. Production and use of compost.
4. Landfills.
5. Collection and recycling of construction and demolition waste.
6. Collection and treatment of hazardous waste.
7. Collection and treatment of packaging waste and electric and electronic waste.
8. Production and use of recovered fuels. Mass incineration.

Thank you for your attention!

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