



Tampere Region – high knowledge and technology



- Tampere Region has a population of 509,000 which makes it the **second largest region** in Finland just after Helsinki capital region
- The leading manufacturing industries in the region are mining construction and mobile machinery but also many other areas like food industry, packaging materials, mechanical engineering, energy and cleantech are represented
- For companies the key reasons to operate in Tampere Region are good availability of skilled employees, ideal geographical location and the close connections to universities
- **Nokia smartphone was born there in 1996**
- **Over 150 years of manufacturing industry heritage**

Picture: <https://invest tampere.fi/>

Low carbon circular economy



FINNISH
GOVERNMENT

Government program's goal is to bring the Finnish economy onto a path of sustainable growth and higher employment

Pirkanmaa's smart specialization

DEVELOPMENT OF A CIRCULAR ECONOMY

THIS IS HOW WE CREATE A

Circular economy

The Finnish roadmap to Circular Economy published in 2016

SMART TAMPERE

Smart industry, health, education, know-how

1 SKILLS

2 PLATFORMS

3 CIRCULAR BUSINESS

Skills

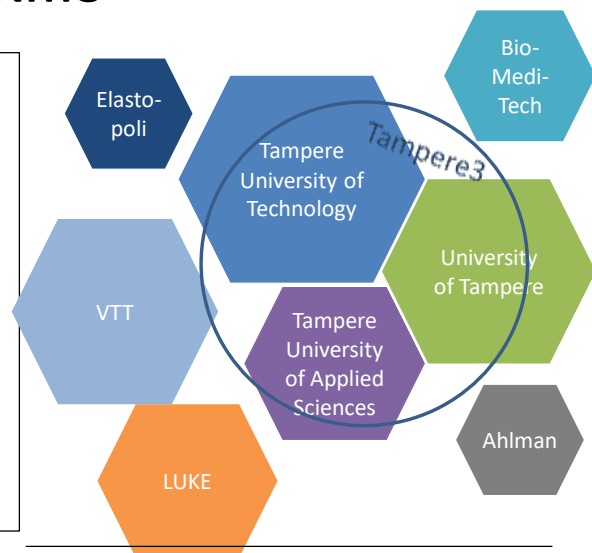
Circular economy teaching for all levels of education

Circular economy teaching is a national effort of 11 universities, 14 universities of applied sciences and 12 vocational colleges.

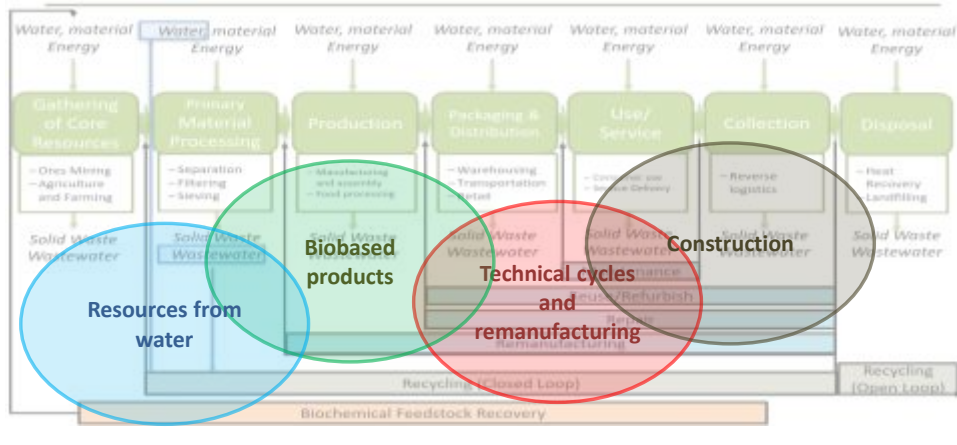
Tampere 3 provides altogether 114 CE related courses. In addition TUT will launch a new study module on circular economy in 2018 and it will offer new open and free CE studies to SMEs.

Top 3 research institutes (TUT, VTT, LUKE) are located in Tampere and they all have multiple research areas like business models, nutrient recycling, construction and technology commercialization.

In order to create a circular economy society, we need a new kind of expertise, co-operation, new kind of thinking and new designing, operational, management and recycling skills.



Circular economy R&D in Tampere Region Top 4



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Platforms



PLANNING OF THE NEW CITY DISTRICT HIEDANRANTA



- New city district with a smart city ecosystem
- Approximately **20 000 - 25 000 inhabitants, 10 000 jobs**
- **Tram connection** to city center
- Diverse choices of living by the lake shore
- Transforming the old factory buildings into a hub of culture and other leisure events

ECO3

An innovative, industrial-scale, multidisciplinary bio- and circular economy business area, ECO3, is being built on the excellently located Kolmenkulma Eco-Industrial Park in Nokia.

600 hectares

- Essential service investments for the area currently around 60M EUR.
- ECO3 competence centre works simultaneously as a **demonstration and pilot environment**.
- **Includes companies in following sectors: nutrient cycles, wood, energy and material cycles**

ECO3

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Circular business

Manufacturing industry

Designing – maintainance – repairing – reusing – leasing – remanufacturing - recycling

Agco Power: remanufactured engines

ZenRobotics: intelligent waste-sorting robot

Molok: waste containers

Linjateräs: painting of metal products

New raw materials

Packaging, textile and chemical industry are interested in new biobased and recycled materials

VTT and TUT: new biobased packaging materials and textiles

TouchPoint: textile and plastic waste into work clothes

Amerplast: transforming collected plastic into recycled plastic bags

Ecolan: organic fertilisers from meat and bonemeal

Construction

Wood is coming again.

High goals of replacing the untouched rock and gravel material sources with recovered materials (wastes, surplus ground etc.).

BioVirrat: wooden schools, kindergartens, etc.

City of Tampere has published UUMA -plan to enhance the use of recovered materials. **Hiedanranta** will be an pilot area and **Tarastenjärvi** will act as a material bank for recycled materials.



<https://www.sitra.fi/en/projects/interesting-companies-circular-economy-finland/>