



1.5 DEGREE

TURKU, FINLAND

Emissions domains addressed by the Pilot Activity



Consumption of non-electricity energy for thermal uses in buildings & facilities



Consumption of electricity generated for buildings, facilities & infrastructure



Industrial process emissions



All vehicles & transport (mobile energy)

Key Focus Areas

Climate work web solution | Digital communication | Capacity building | Climate nudging | Climate Team | 1.5-Degree life | Business clusters | Carbon handprint

Levers of Change

Democracy and participation | Governance and policy | Learning and capabilities | Social innovation | Technology/infrastructure

Description of the Pilot Activity

Turku has made substantial progress toward its 2029 carbon neutrality goal, but reaching the last stretch requires deeper coordination with businesses, residents, and civil society. The 1.5-Degree City pilot strengthened multi-actor climate action by creating an online monitoring platform, catalysing business engagement through the Climate Team network, and using behavioural science to encourage sustainable lifestyles.

Impact & Results

The pilot expanded Climate Team into a structured collaboration platform engaging over 120 partners and nearly 100 climate actions. Companies were supported in carbon footprint and handprint calculations. Clusters of large firms with subcontractors began aligning toward carbon-neutral value chains.

Turku proactively reported consumption-based GHG emissions, with an estimated reduction of 24 ktCO₂e through enabling conditions for citizens. City-wide territorial emissions declined from 527.2 ktCO₂e (2020 baseline) to 381.4 ktCO₂e in Year 2—a reduction of 145.8 ktCO₂e over two years.

An online platform was developed to monitor climate actions by City Group, companies, and citizens—making emissions data visible and comparable. Carbon handprint methods were tested with companies and citizens, helping them see positive impacts beyond just reducing footprints.

A climate ambassador network of 42 ambassadors was activated. Citizen dialogues and campaigns communicated relatable examples of sustainable lifestyles. A free-time mobility pilot explored how nudging can influence everyday transport choices.

Innovation Highlights

The Climate Team network model facilitates collective responsibility by bringing large firms together with their subcontractors to align toward carbon-neutral value chains—demonstrating how cities can catalyse business ecosystem transformation through facilitation rather than regulation.

Carbon handprint methodology shifts the narrative from burden to opportunity, making climate action more motivating and accessible.

