

International Urban Cooperation

Turku, Nagano City, Obuse Town

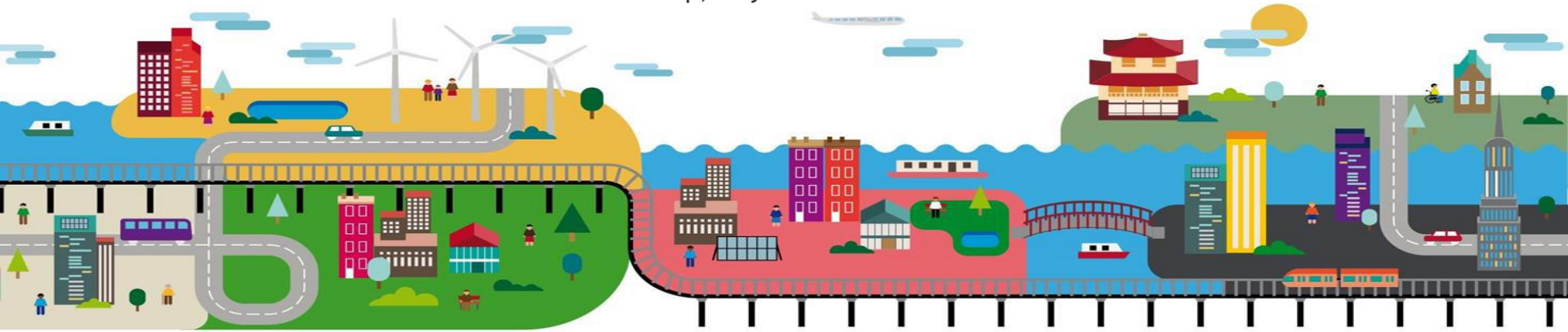
Integration of urban-rural circular economy in food-water-energy nexus

Saori Matsuda

Project Manager, Environment Protection and Climate Change Policy Section, Environment Department,
City of Nagano

Lotte Suveri

Project specialist, Climate and Environment Policy Unit, Central Administration, City Development
Group, City of Turku



IUC city pairing, as of November 2020



EU - 日本 国際都市間協力プロジェクト
INTERNATIONAL URBAN COOPERATION
European Union - Japan



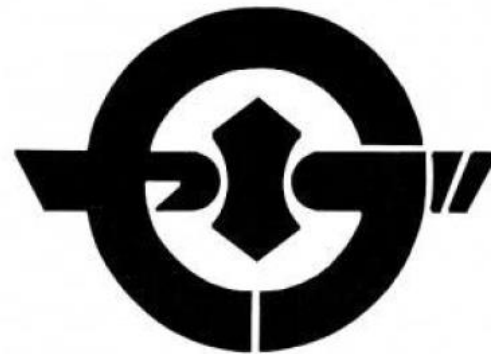
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City of Turku



City of Nagano



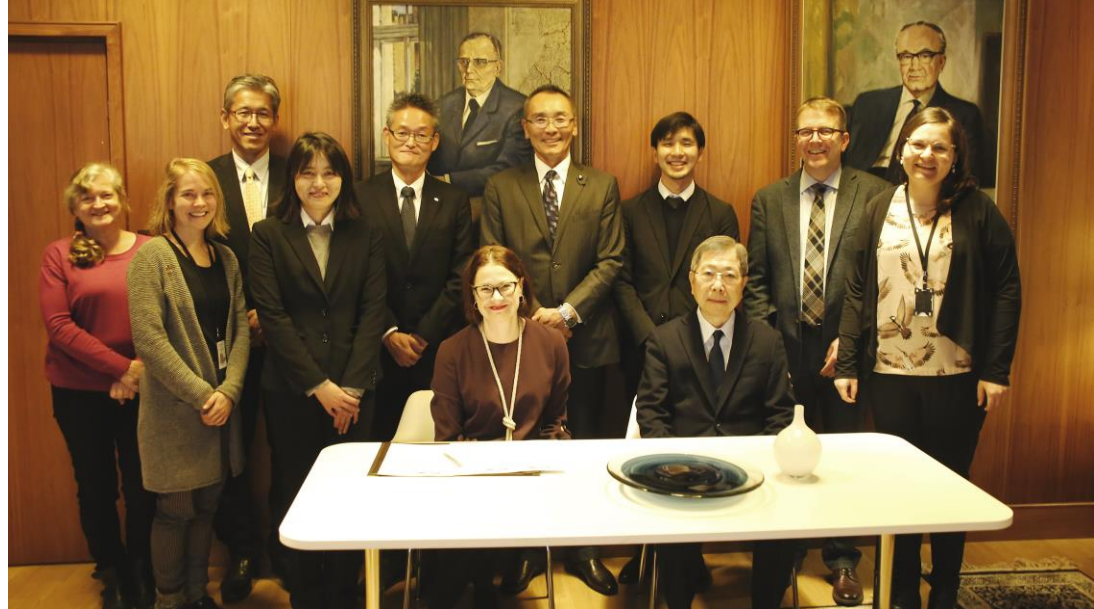
Town of Obuse

Main activities

- Visit to Turku (Nov 2019)
- Webinars (summer/autumn 2020)
- Twinning campaign / Future cooperation (Nov 2020 - Feb 2021)



Nagano and Obuse visiting Turku Nov 2019



1st learning exchange in Turku

13th to 15th November 2019

Getting to know circular solutions in the Turku region

- ✓ Cities' climate and sustainability policies
- ✓ Circular waste water treatment plant in Turku
- ✓ Textile recycling and circular economy hubs
- ✓ Renewable district heating and the multi-fuel power plant
- ✓ Finnish archipelago and medieval surroundings

【What we learned】

- The city of Turku has incorporated the idea of a "circular economy" into each measure toward the realization of a sustainable society, including measures against global warming.
- We were able to learn about initiatives such as "Effective use of everything as a resource" at various sites.



Examples of effective use of resources in Nagano City

Nagano Biomass Town Vision: March 2010

Objectives:

Prevent global warming

Increase of GHG emissions of Nagano:
+8.4% in 2009 compared to 1990 (base year of Kyoto Protocol)

Form a society based on circular economy

Sustainable society based on circular economy, utilizing biomass

Activate mountainous areas

75% of the city is occupied by mountainous areas, where communities are facing “economic and demographic declines” associated with fewer children and aging of population

Create new industries

Biomass industries using local resources

Basic directions for establishing a biomass town

1. Promotion of projects with less environmental load
 - Reduction of CO₂ emission, cleaner projects, advanced use of biomass towards future
2. Effective use of biomass according to regional conditions
 - Plenty of thinned wood available in mountainous areas
 - Residues produced from industries in the region
3. Creation of new industries and employment centering agriculture and forestry, and activation of mountainous areas
 - Woody biomass, wasted mushroom bed (woods, sawdust, etc.), etc.

[Example] Effective utilization of forest resources



Besides this

- effective use [power] of garbage
- Utilization of resource crop sorghum etc.



Webinar series on circular economy and climate

During summer and autumn 2020



Webinar

- In May 2020, a delegation from Turku City was scheduled to visit Obuse Town, Nagano City.
- However, due to the influence of COVID-19, we have not been able to make a visit, and we have no plans for the future.
- Under such circumstances, we continue to learn about global warming countermeasures and efforts related to the circular economy through the WEB.

【Theme proposal from Nagano and Obuse】

- Global warming countermeasures related to the transportation sector
- How we can reduce and utilize general wastes



Current situation in Nagano City

(2) Examples of the measures to reduce CO2 emissions from automobiles

① Encouragement of eco-driving using an eco-driving simulator



- Test if you are driving eco-friendly
- Simulate how much CO2 is emitted during operation

② Install EV (electric vehicle) chargers at roadside stations.



Public awareness

② Introduce electric vehicles to municipal vehicles



- When introducing the second unit (February 6, 2011)
- Held electric vehicle information session
- Currently owns four cars

Started operation from March 21, 2015

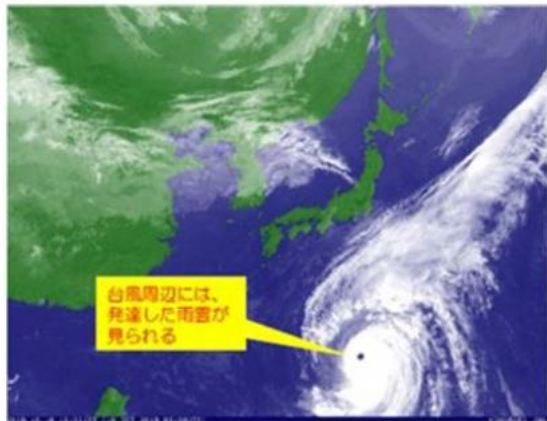


Katarina Salokannel 8.10.2019



Background of the topic proposal of Nagano and Obuse Damaged by great Typhoon in 2019

- Nagano city and Obuse town were hit by Typhoon on October 13, 2019.
- Thousands of houses were damaged due to flood.
- Citizens getting more concerned about climate change and its affect to our daily lives.



10月10日12時00分 衛星画像(赤外)



Nagano City Global Warming Prevention Countermeasures Promotion Plan, 2017–2050

【GHGs Reduction Targets】

	Japan	Nagano Prefecture	Nagano City
Year	May 2016	February 2013	April 2017
Base Year	FY 2013	FY 1990	FY 2005
Reduction Target	【Short-term】 FY 2020 (-3.8%) ※1 【Medium-term】 FY 2030 (-26%) ※2 【Long-term】 FY 2050 (-80%) ※3	【Short-term】 FY 2020 (-10%) 【Medium-term】 FY 2030 (-30%) 【Long-term】 FY 2050 (-80%)	【Short-term】 2021 (-21%) 【Medium-term】 2030 (-30%) 【Long-term】 2050 (-80%)
	GHG emissions per person (2012) ※population data : Oct 2012		
	10.9 ton	7.5 ton	5.3 ton

2021

- Performance evaluation of short-term goals
- Plan to be revised

Reflect the ideas gained from the exchange with the city of Turku in the measures to achieve the goal

※1 Base year for the short-term target is FY 2005 ※2 25.4% compared to FY2005 ※3 Base year is not specified

【Policy and countermeasures】 6 policies and 33 countermeasures

P1. Effective use of renewable energy

P2. Promotion of energy saving

P3. Improvement of walkable and livable environment

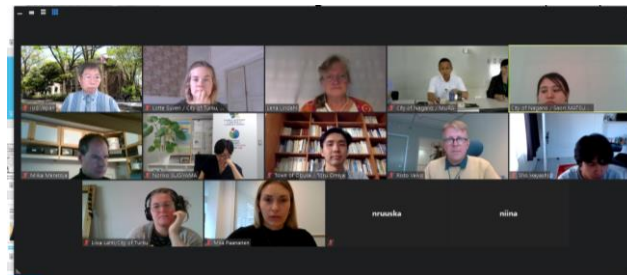
P4. Promotion of tree planting and mitigation of heat environment

P5. Promotion of low-carbon activities

P6. Adaptation to the effect of global warming

Webinar "Community resilience"

How to support the sense of community in the state of emergency, like extreme weather conditions due to climate change?



Turku's climate plan 2029:

6.2 Adaptation measures

Turku will prepare for the identified risks and their effects, striving towards becoming a more climate-proof city. This is partly fulfilled through already completed measures and plans. The most important entities in adaptation measures include:

Increasing information on climate
Water management and building
Safeguarding ecosystems
Adaptation projects
Supporting a sense of community



Volunteer reception



Mud out of a house



70,000 volunteers from all over Japan cooperate

	Total number of people	Activity content
Volunteer (From October 16, 2019 to March 21, 2020)	64,705	Carrying out disaster-affected household goods, earth and sand, mud, etc. in the affected household, cleaning houses, transporting disaster waste, supporting disaster volunteer center/satellite operations, etc.
Agricultural volunteer (November 14, 2019 to February 16, 2020)	6,773	Removal of disaster wreckage that has flowed to apple fields and rice fields, removal of mud around fruit trees, etc.

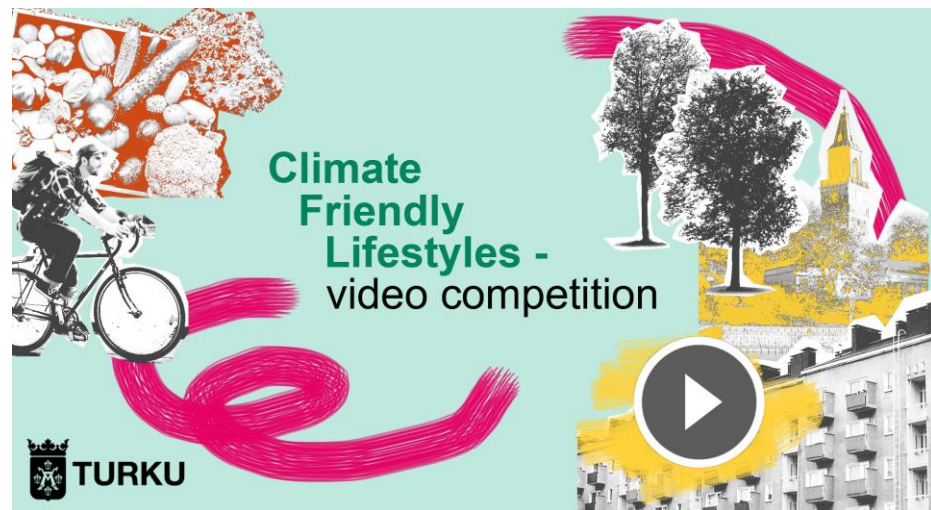
Future cooperation



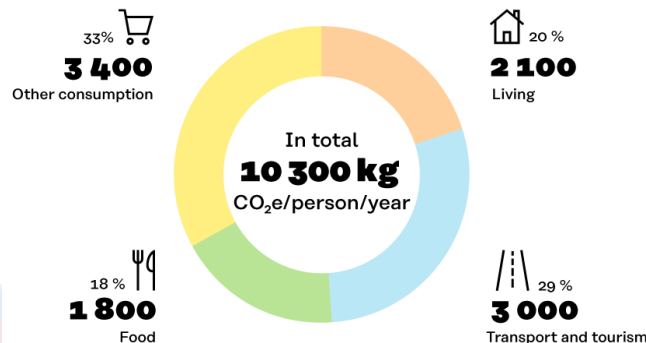
Twinning campaign

- Promote circular economy and climate action in the everyday life of the citizens
- Applying circular economy principles to lifestyles (especially in areas such as housing, food, mobility and energy)

https://www.turku.fi/en/news/2020-10-29_take-part-15-degree-life-video-competition



CARBON FOOTPRINT OF THE AVERAGE FINN



Future efforts

【1.5 degree life campaign】

- We received a proposal from the city of Turku as an initiative for public enlightenment that is possible even with the corona vortex, and we have also started recruiting videos in Nagano city.
- We believe that this initiative will be a good opportunity for citizens to be aware of how much CO2 is emitted by their daily lives and consumption behavior.



<https://www.city.nagano.nagano.jp/soshiki/kankyo/461130.html>

- The first is to welcome the Turku City delegation to Obuse Town, Nagano City.
- Further discussions on "circular economy" when visiting.
- Continue interaction through webins and 1.5 degree life campaigns.



https://www.youtube.com/watch?v=KW51JgNL4LU&feature=emb_logo

