



Session 6: Local and Regional Policy Options for Sustainable Innovation and Development

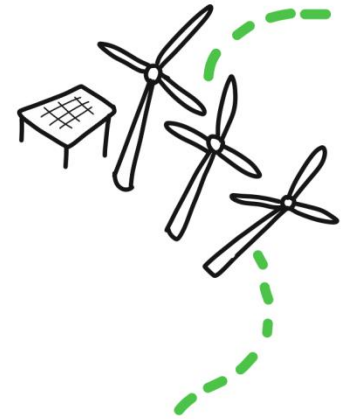
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RESOURCE WISDOM
A simple innovation from Jyväskylä, Finland

Agenda:

1. Resource Wisdom – regional operational model
2. Public engagement and fast prototyping
3. Scalability of operational model





An attractive center for growth

- 260 000 citizens
- One of Finland's fastest growing cities
- 2nd most popular city to move
- 3rd best city image
- 2nd happiest inhabitants



RESOURCE WISDOM

Jyväskylä's Vision and Road Map

SITRA

Energy

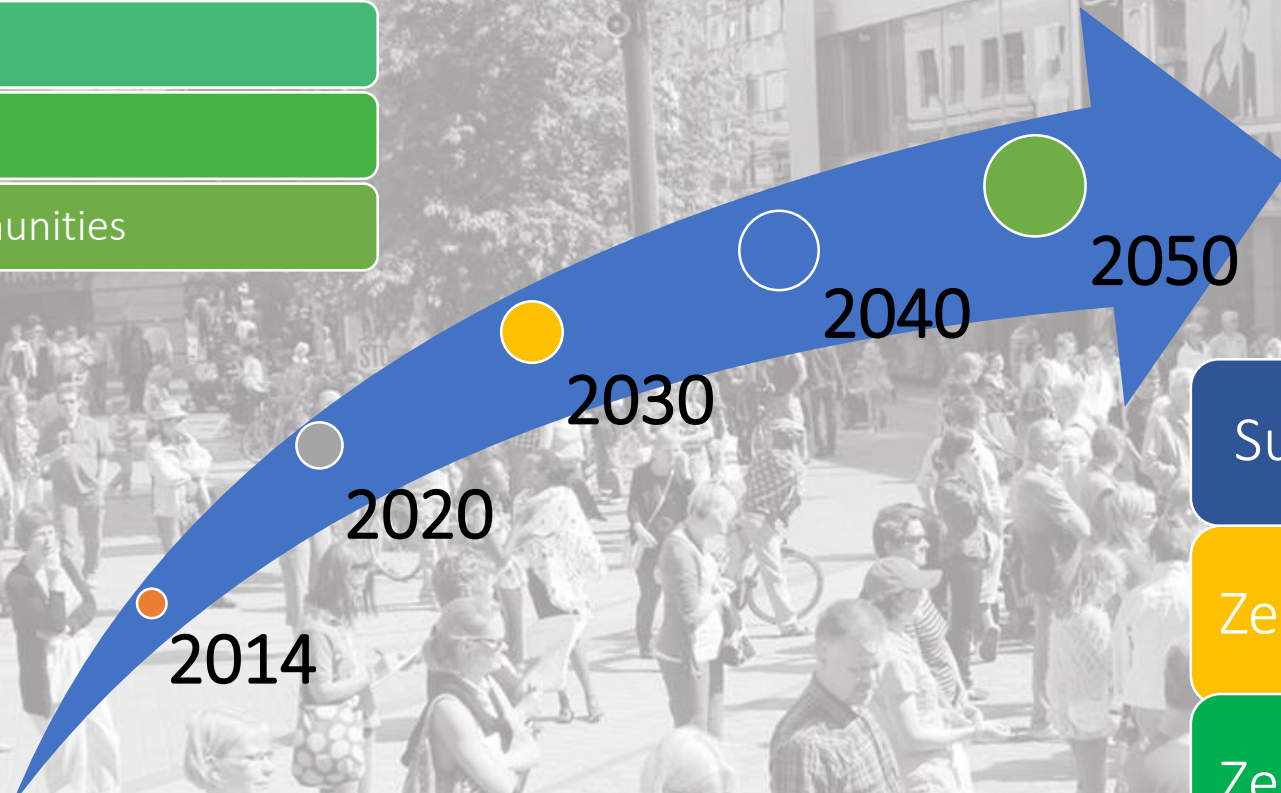
Transport

Waste

Food

Water

Communities



Sustainable wellbeing

Zero CO₂ emissions

Zero waste

One planet ecological footprint

<https://www.youtube.com/watch?v=Rb780wqnRQ8>



RESOURCE WISDOM

= The ability to use different resources, raw material, energy, products and services, facilities and time in a carefully considered way – which promotes well-being and sustainable development



Jyväskylä's Road Map to Resource Wisdom

Sustainable wellbeing
Zero CO₂ emissions
One planet ecological
footprint
Zero waste

2015-2016	2017-2019	2020-2025	2030	2050
Renewable Energy				
<ul style="list-style-type: none"> Kangas area as a R&D platform and reference area 	<ul style="list-style-type: none"> New solutions for timber supply chain Energy efficient residential areas 	<ul style="list-style-type: none"> 1-2 wind power parks Kangas's solar power plant 	<ul style="list-style-type: none"> Carbon neutral production of electricity and heat 	Fossil-free and carbon-neutral energy production and consumption
Sustainable Transport				
<ul style="list-style-type: none"> New solutions for light traffic and the use of mass transit and private vehicles 	<ul style="list-style-type: none"> Biogas and charging stations for electric vehicles Mass transport as a forerunner in use of renewable fuels 	<ul style="list-style-type: none"> Smart solutions to combine different ways of commuting 	<ul style="list-style-type: none"> Popular and rapid mass transit will connect population centers 	Fossil-free and carbon neutral transportation
Waste as a Resource				
<ul style="list-style-type: none"> Biogas plant at Mustankorkea Industrial symbioses 	<ul style="list-style-type: none"> Ecoindustrial park at Mustankorkea Change in attitude: Waste = Material 	<ul style="list-style-type: none"> 70% of municipal waste to be reused as material New solutions in to sharing economy 	<ul style="list-style-type: none"> Services are purchased and also sustainable, fixable and made from reused materials products are purchased 	Sustainable use of virgin materials, maximal circulation of materials
Healthy Food				
<ul style="list-style-type: none"> Public procurement supports local production Leftover lunch concepts increases in popularity 	<ul style="list-style-type: none"> Meat consumption replaced by local seasonal vegetables 	<ul style="list-style-type: none"> Strong brands in local production, easy and affordable purchase, substantial employment effects 	<ul style="list-style-type: none"> Household food waste decreased by 75% Meat consumption at a healthy and sustainable level 	Food production and consumption within one-planet principle
Valuable Water				
<ul style="list-style-type: none"> Center for water business 	<ul style="list-style-type: none"> Closed loop water circulation in industrial processes Individual water meters for households 	<ul style="list-style-type: none"> Biorefinery at a waste water treatment facility Clean natural waters are a part of the Jyväskylä brand 	<ul style="list-style-type: none"> All fractions of waste water are being utilized at the water treatment biorefinery 	Increasing water business
Sustainable Communities				
<ul style="list-style-type: none"> Forerunner in experimental culture Resource Wise hospital 	<ul style="list-style-type: none"> Resource Wisdom also taught in schools Smart Knowledge Summit 	<ul style="list-style-type: none"> Greencare, nature and wellness travel 	<ul style="list-style-type: none"> City environment will support the development of competences and smart technologies Vibrant and sustainable living and entrepreneurship 	A vital and attractive area for people and business



How did we get the public involved?

Key 1: Communication

Professional communicators

- Multiple media platforms
- Large media coverage
- Constant inflow of information
- Creating stories of everyday individuals



Key 2: Large stakeholder involvement

Operational Model Working Group

29 selected individuals from public, private, non-governmental, research and educational institutes

- Together in planning workshops
- Study trip abroad



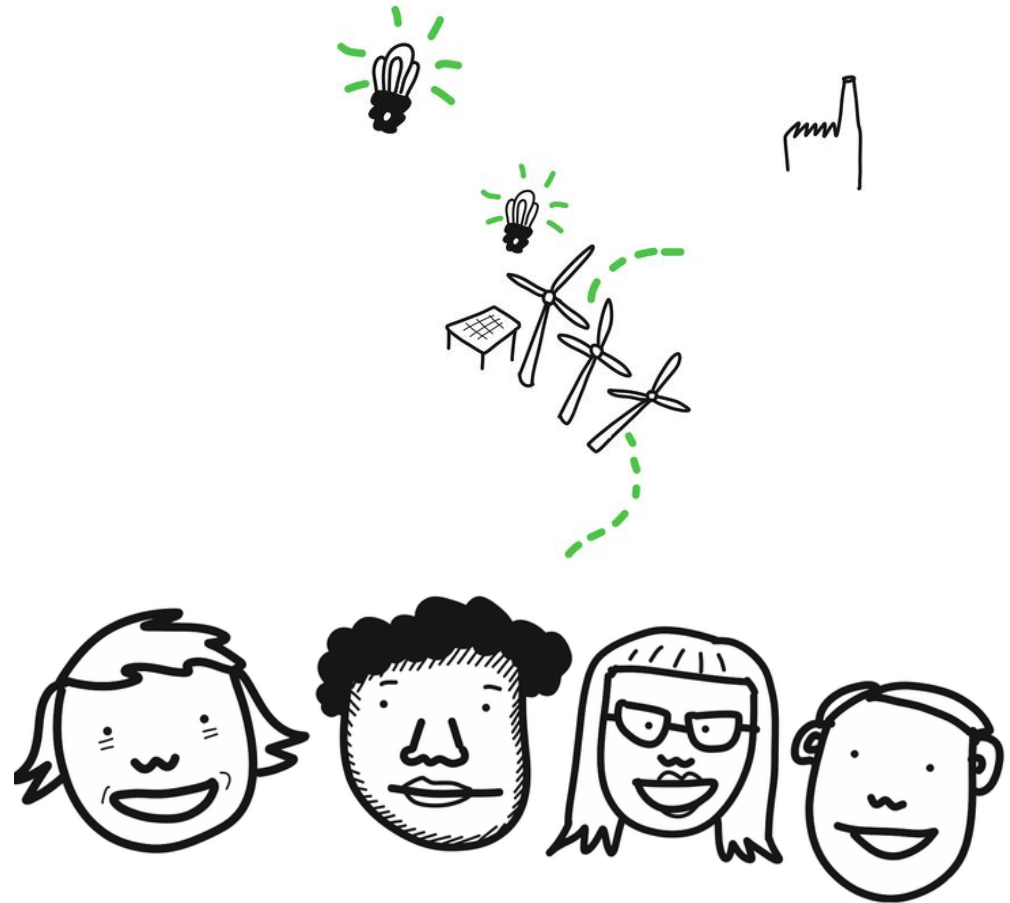
Key 3: Public empowerment & fast prototyping

An open platform for anyone to suggest resource wise ideas

- Online
- 212 ideas
 - 14 chosen for rapid development
 - From the 14: Best ideas chosen for additional development and funding

14 experiments

1. Leftover lunch
2. Try at least once
3. Water-mean apartment building
4. Wisely illuminated housing association
5. Local food direct
6. Green Care
7. My ridiculous car journey
8. Young Eco Agents
9. HelpAtHand
10. Shared equipment for youth sports
11. Club space for all!
12. Fixers' Market
13. Jyväskylä region mass info
14. Resource-efficiency myth busters



Example rapid development pilots



Bus Leap

Free public transportation day doubled the amount of passengers,

cutting

CO₂ emissions by 60%



Resource-wise Living

Installation of LED lighting produced

75 % (5000 kWh) savings in electricity

and **smarter resident behavior decreased water consumption by 20 %** (from 120 l to 90 l)

**20 solar panels (5 kW)
4000 kWh/year**



1.50€ Leftover lunch

Sold in schools to local residents at a low price, saving

1.3 kg CO₂ / meal

4.3 kg resources / meal

50,000 meals / year

Operational Model Scaled Nationally

- Jyväskylä as pioneer
- Scaled to 7 other cities in two phases:
 - Spring, 2015: 3 cities
 - Spring, 2016: 4 cities
 - Today: over 720,000 citizens
 - Widely popular in 2016:
 - 10 applicant cities, 4 chosen



Cooperation Models with International Cities



FIRST STEPS TO RESOURCE WISDOM

Introduction of
regional
operating model

**Experience
sharing and
motivating for
sustainable
regional growth
and wellbeing**

Conference talks
and quick
trainings



RESOURCE WISE VISIT

Learn and
benchmark
Resource
Wisdom in
Jyväskylä

**Dedicated tours
of Resource Wise
companies and
areas**

Workshop
sessions to plan
Resource
Wisdom at your
local region

**Free time
activities and
tours**



RESOURCE WISE EXPERT IMPORT

Dedicated expert
for your local
geography to
plan Resource
Wise activities
on-site

**Assessment of
local situation
and possibilities**

Workshop
sessions to plan
Resource
Wisdom at your
local geography

**Training sessions
for local experts
and officials**



RESOURCE WISDOM PROJECT

Large scale and
tailored
implementation
of the Resource
Wisdom model

**Multidisciplinary
approach to
create
sustainable
wellbeing and
economic
performance at
your local region**



EXPERIMENT AS A TOOL FOR AGILE DEVELOPMENT



REAL ENGAGEMENT

Co-creation via interactive platform provides foresight and info on problems occurring in resident's daily living

SUSTAINABILITY GETS ACCEPTANCE

Successful experiments tell powerful stories how sustainable lifestyle makes urban life better

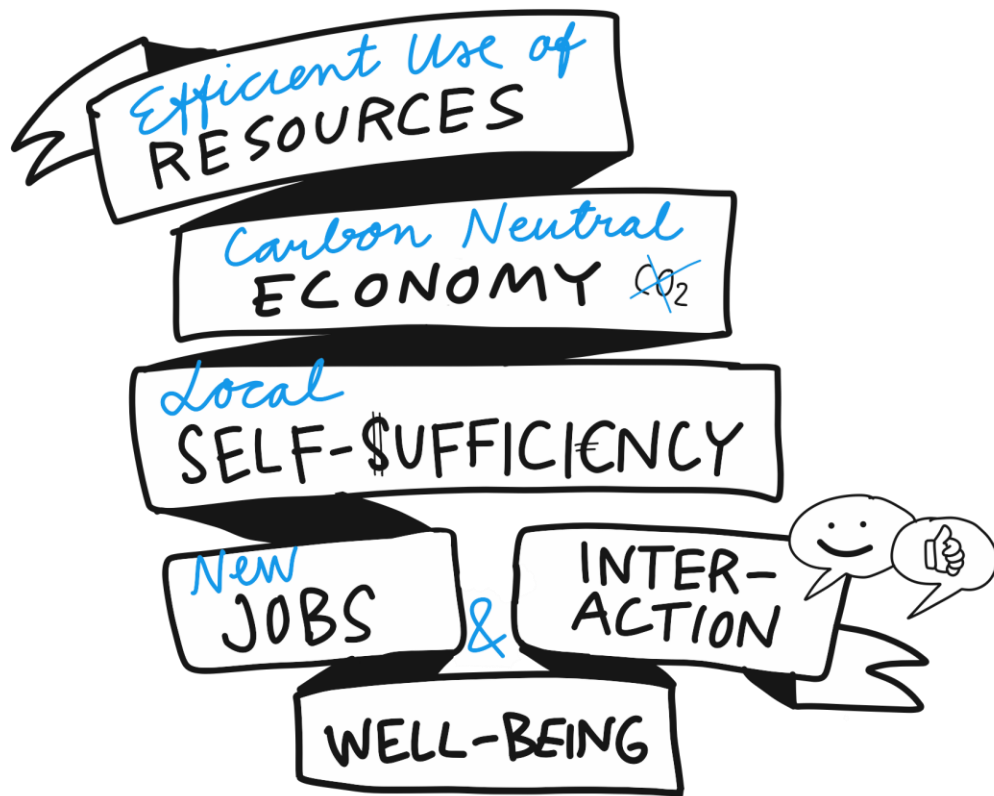
LEARNING BY PROTOTYPING

Testing ideas in real environment makes abstract issues concrete and sensible actions

CHALLENGING "BUSINESS AS USUAL"

Culture of experiments enable us to think outside-the-box and break routines





THANK YOU.

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