Circular Cities and Regions Initiative Projet Villes et régions circulaires

Doughnut Economics and the Circular Economy: Designing for Thriving Communities Économie du beigne et économie circulaire : Concevoir des communautés prospères

May 2, 2023, 8:30 – 9:45 am PDT / 11:30 am – 12:45 pm EDT 2 mai 2023, 8h30 - 9h45 HAP / 11h30 - 12h45 HAE











We would like to acknowledge and give thanks to all of the Indigenous Nations, upon whose territories we may be located, for being caretakers of the land on which we work, play, and explore.

Nous tenons à remercier toutes les nations autochtones, sur les territoires desquelles nous nous trouvons, d'être les gardiens de la terre sur laquelle nous travaillons, jouons et explorons.

Moderators / Animateurs



Joanne Gauci

Senior Policy Advisor/ Conseillère senior

National Zero Waste Council (Metro Vancouver) / Conseil National Zéro Déchet (Metro Vancouver)



Etienne Angers

Team Lead – Circular Economy and Waste Prevention / Chef d'équipe – économie circulaire et réduction à la source

RECYC-QUÉBEC

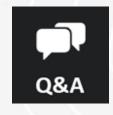
Housekeeping / Bienséance

- Reminder: simultaneous interpretation is available to listen in French or English
- Introduce yourself in the Chat box

Ask questions in the Q & A box





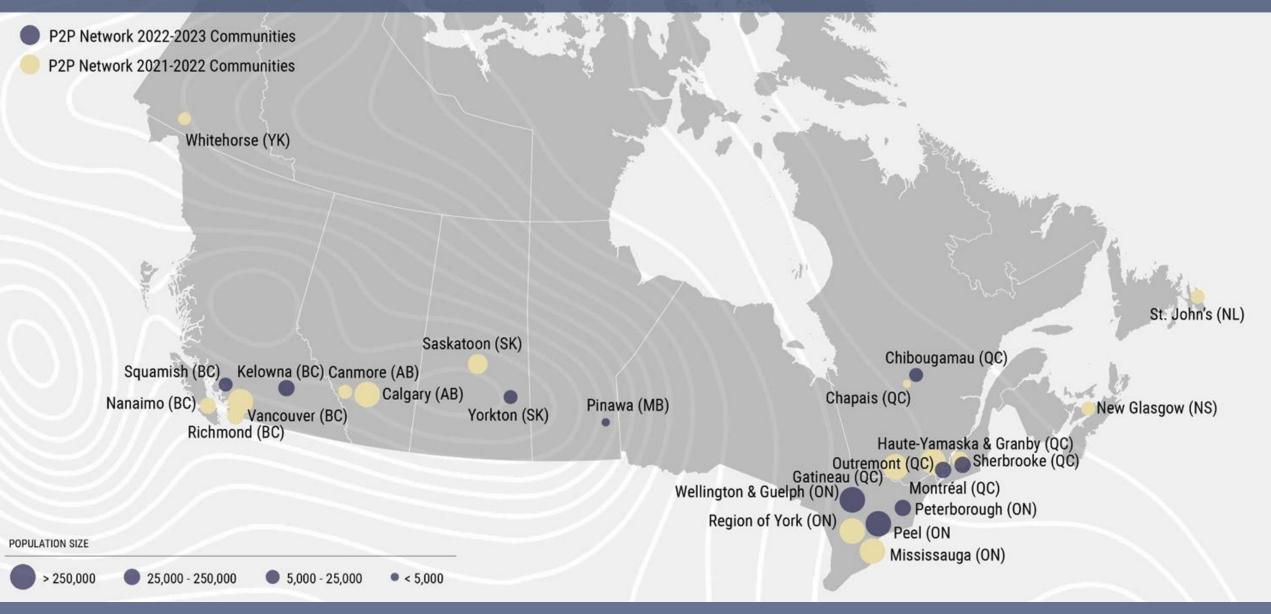


- Rappel : l'interprétation simultanée est disponible pour écouter en français ou en anglais
- Présentez-vous dans la boîte de dialogue

 Posez des questions dans la boîte de discussion OU réactivez le microphone pendant les questions-réponses

Circular Cities & Regions Initiative

Providing Canadian local governments with the knowledge and tools to accelerate circular economy solutions



Speakers / Présentateurs



Leonora Grcheva

Cities and Regions Lead Doughnut Economics Action Lab

Responsable villes et régions Laboratoire d'action sur l'économie du beigne



Barbara Trachte

State Secretary for Economic Transition and Scientific Research Brussels Capital Region

Secrétaire d'État à la Transition économique et à la Recherche scientifique Région de Bruxelles-Capitale



Juan-Carlos Goilo

Innovation and Research and Development City of Amsterdam

Innovation et recherche et développement
Ville d'Amsterdam



Ben Geselbracht

City Councillor City of Nanaimo

Conseiller municipal Ville de Nanaimo



Transforming cities with Doughnut Economics

Leonora Grcheva, Doughnut Economics Action Lab

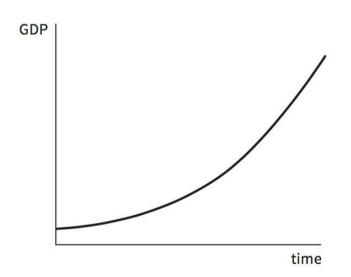
@DoughnutEcon | @LGrcheva | doughnuteconomics.org

An invitation for new economic thinking

DOUGHNUT ECONOMICS Seven Ways to Think Like a 21st-Century Economist KATE RAWORTH

The vision for progress

20th century economics

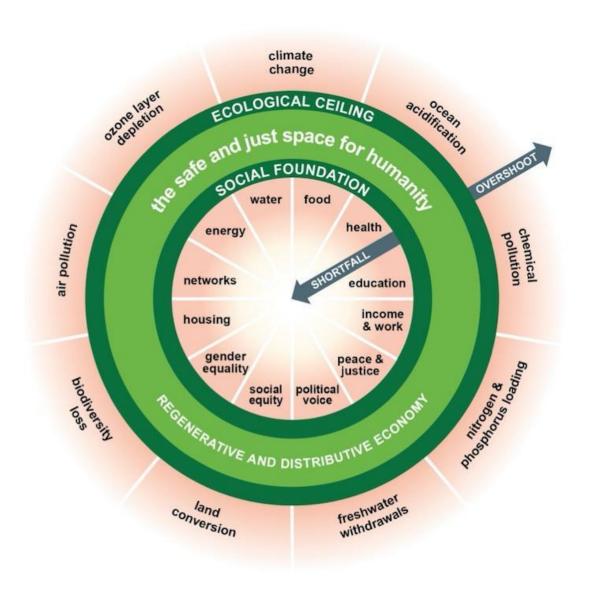


21st century economics





The Doughnut: a compass for human prosperity





The Doughnut: a compass for human prosperity

SDGs

UN Sustainable Development Goals



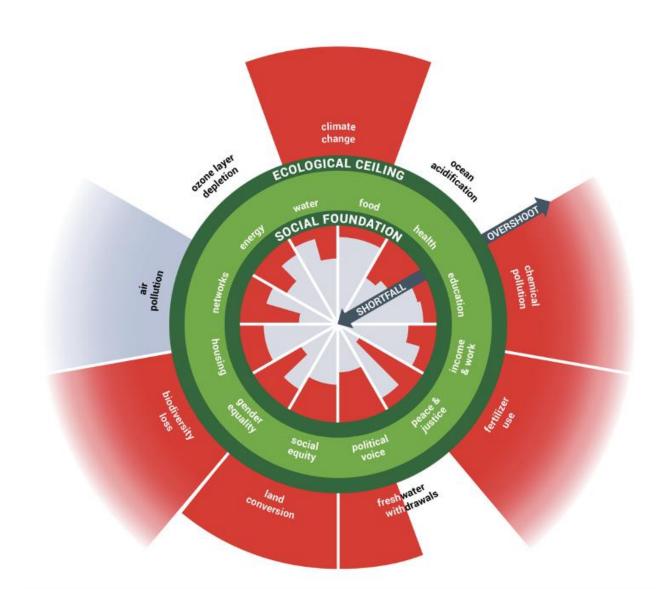


planetary boundaries



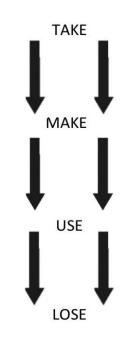


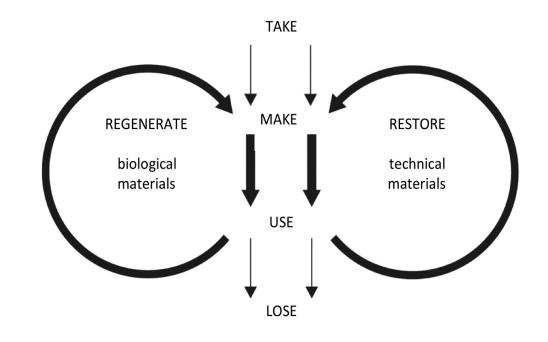
A world dangerously out of balance





To change the future, change the dynamics





Degenerative

running down Earth's life-supporting systems

Regenerative

working with and within the cycles of the living world



Degenerative

Sustainable



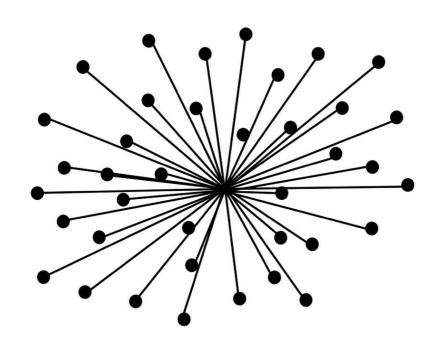


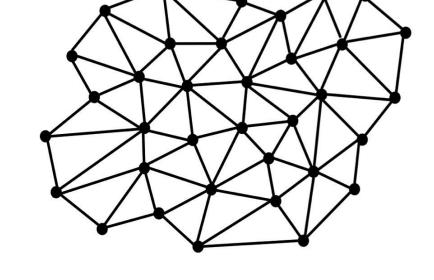






To change the future, change the dynamics





Divisive

Distributive

capturing opportunity and value in the hands of a few

sharing opportunity and value with all who co-create it





Inclusive

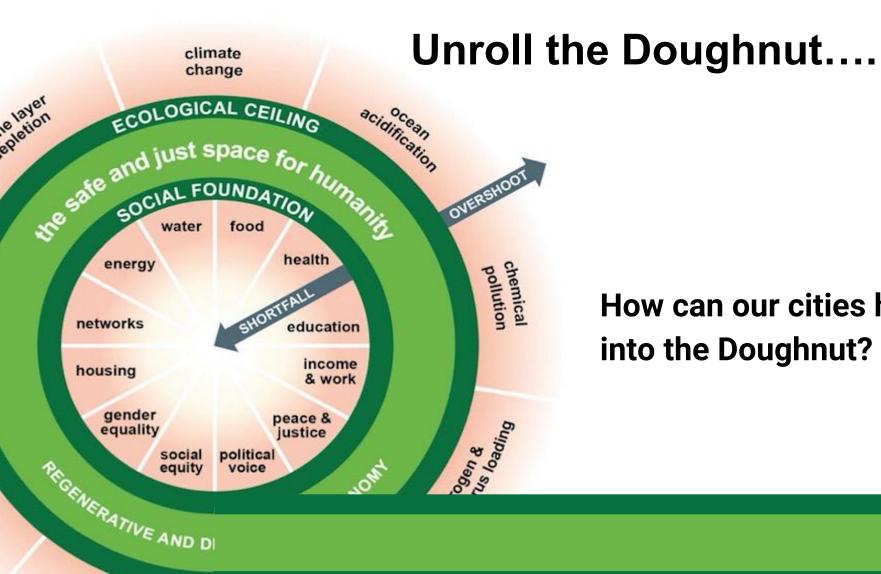












freshware withdrawals

conversion

How can our cities help bring humanity into the Doughnut?

How can our city become a home to thriving people in a thriving place, while respecting the wellbeing of all people, and the health of the whole planet?





How can our city be as generous as nature?

Local aspirations

1 LOCAL-SOCIAL

How can all the people of our city thrive?

3 GLOBAL-ECOLOGICAL

How can our city respect the health of the whole planet?

Global responsibilities

4 GLOBAL-SOCIAL

How can our city respect the wellbeing of all people?





How can our city be as generous as nature?

Local aspirations

































How can we help all the people of our place thrive?

GLOBAL-ECOLOGICAL

How can our city respect the health of the whole planet?

Global responsibilities



How can our city respect the wellbeing of all people?





How can we restore and be inspired by local nature?

82







Local aspirations





























Health Education Housing Energy Connectivity Mobility Community Culture Income Social

How can we help all the people of our place thrive?

GLOBAL-ECOLOGICAL

How can our city respect the health of the whole planet?

Global responsibilities



How can our city respect the wellbeing of all people?





How can we restore and be inspired by local nature?

Cleanse

82

;o;





Local aspirations





























Water Health Education Housing Energy Connectivity Mobility Community Culture Income Social

How can we help all the people of our place thrive?

How can our city respect the health of the whole planet?





















Global responsibilities



How can our city respect the wellbeing of all people?





How can we restore and be inspired by local nature?

Cleanse

82

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Local aspirations































How can we help all the people of our place thrive?

How can our city respect the health of the whole planet?





















· Global responsibilities





























How can our city respect the wellbeing of all people?





How can our city be as generous as nature?

3 GLOBAL-ECOLOGICAL

How can our city respect the health of the whole planet?

Data and metrics
Spatial visions
Thematic strategies
Projects
Decisions

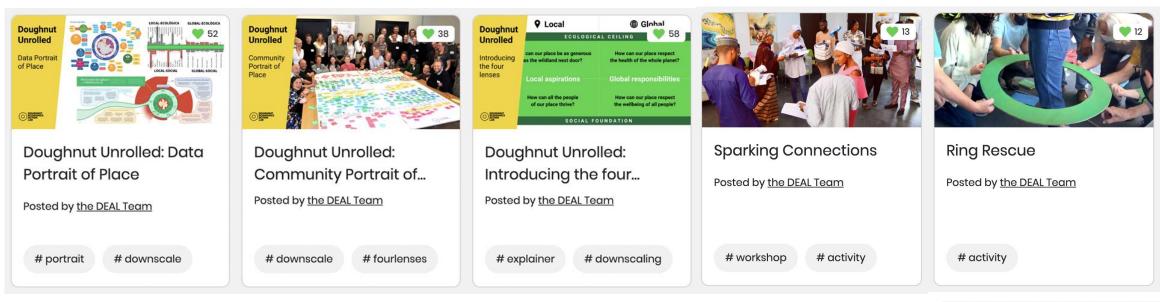
1 LOCAL-SOCIAL

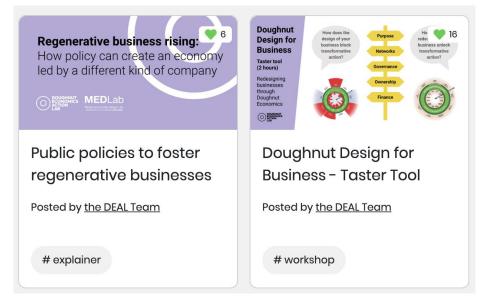
How can all the people of our city thrive?

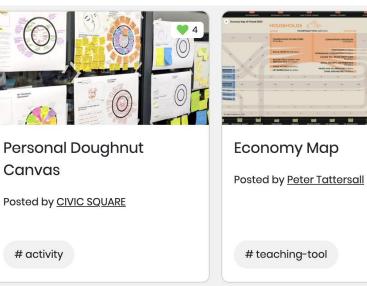
4 GLOBAL-SOCIAL

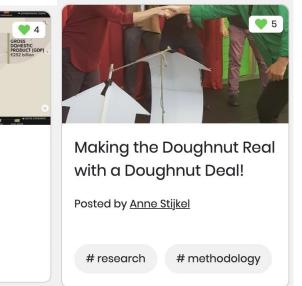
How can our city respect the wellbeing of all people?

Tools for getting started

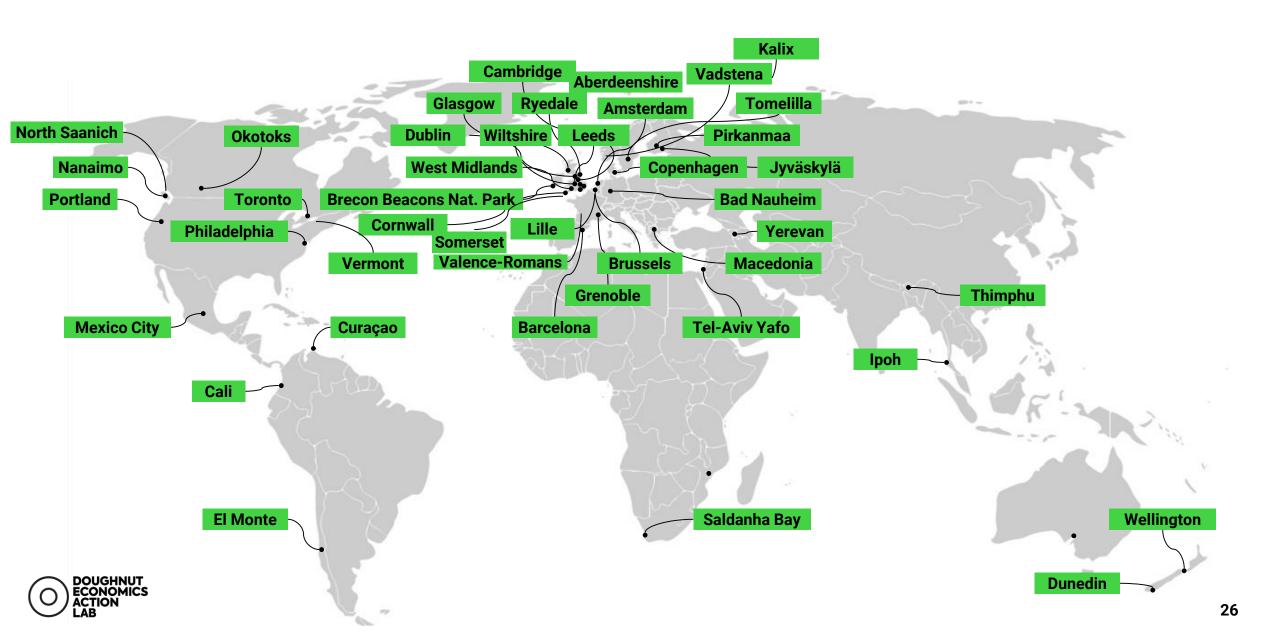




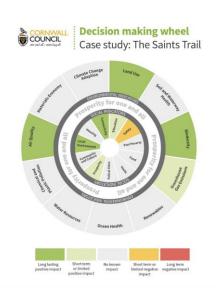




Cities and regions engaging with the Doughnut, 2023



How cities and regions are getting started...

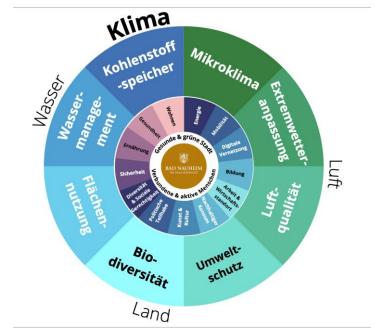












How cities and regions are getting started...

Taking steps



Starting conversations and internal learning



Testing the Doughnut on ongoing projects



Empowering local change-makers

On a journey



Data, measuring and monitoring



#5

City-wide and sectoral policy and strategy



#6

Demonstrator projects

Committing long-term





Doughnut Economics as a strategic compass



#8

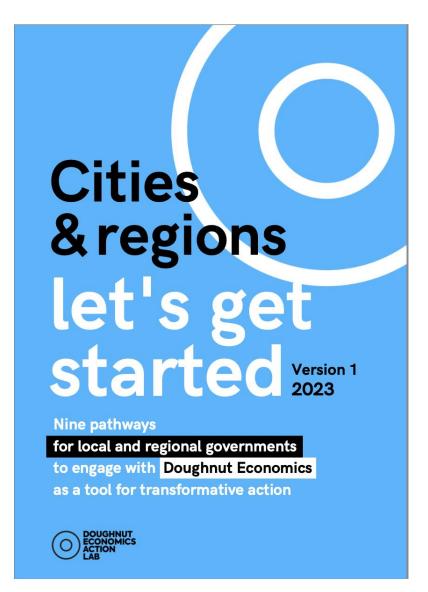
Decision-making and project assessment



#9

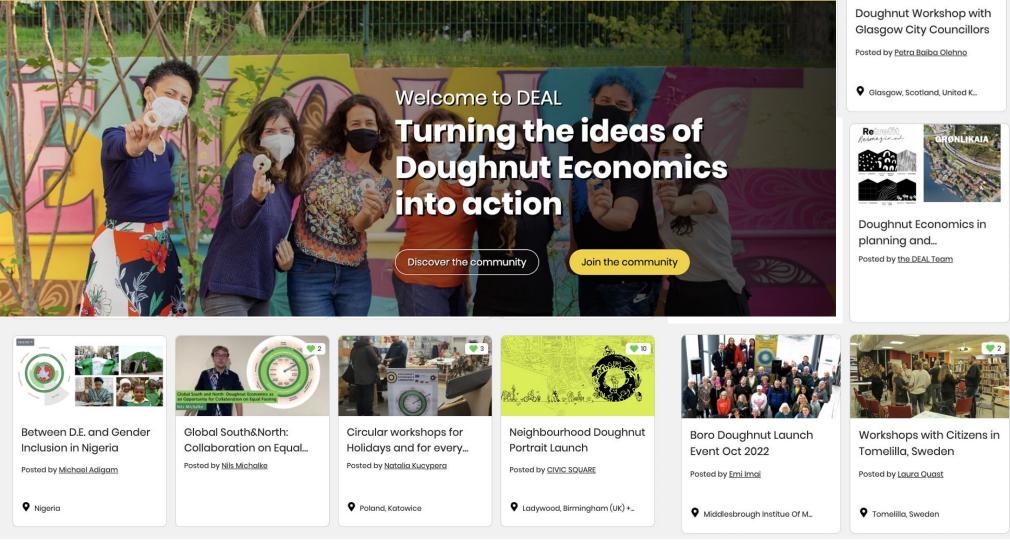
Identifying levers of transformative change

How cities and regions are getting started...



https://doughnuteconomics.org/tools/210





doughnuteconomics.org



BRUSSELS DONUT

BARBARA TRACHTE

SECRETARY OF STATE OF THE BRUSSELS-CAPITAL REGION, RESPONSIBLE FOR ECONOMIC TRANSITION AND SCIENTIFIC RESEARCH



1 FEDERAL STATE: BELGIUM

> 3 REGIONS





The Brussels-Capital Region

THE BRUSSELS-CAPITAL REGION

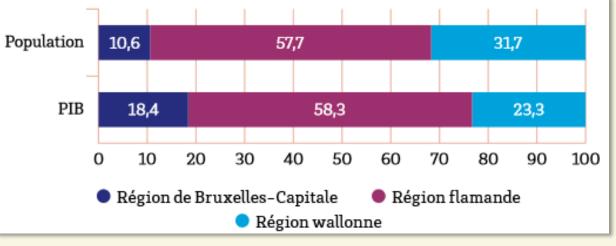


- Surface area: 162km²
- 1,209 million inhabitants
- GDP: 84 billion €
 - 92% services
 - 3% industry
 - 5% other

BRUSSELS, PARADOX OF TODAY'S ECONOMY

- GDP per capita : 61.300€ (2019)
- Poverty rate: 31,4% (2018)





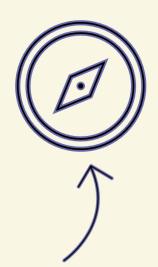


PUT THE ECONOMY AT THE RIGHT PLACE

Elections 2019: Ecolo célèbre sa victoire: «Le travail commence aujourd'hui»



A new compass, different from GDP



Secrétaire d'État bruxelloise de la <u>Transition</u> Économique et de la Recherche Scientifique

THE DONUT FRAME

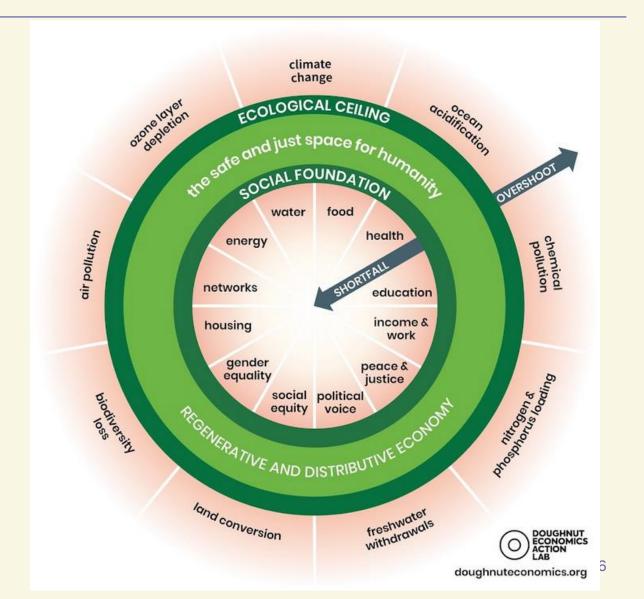


New vision of progress

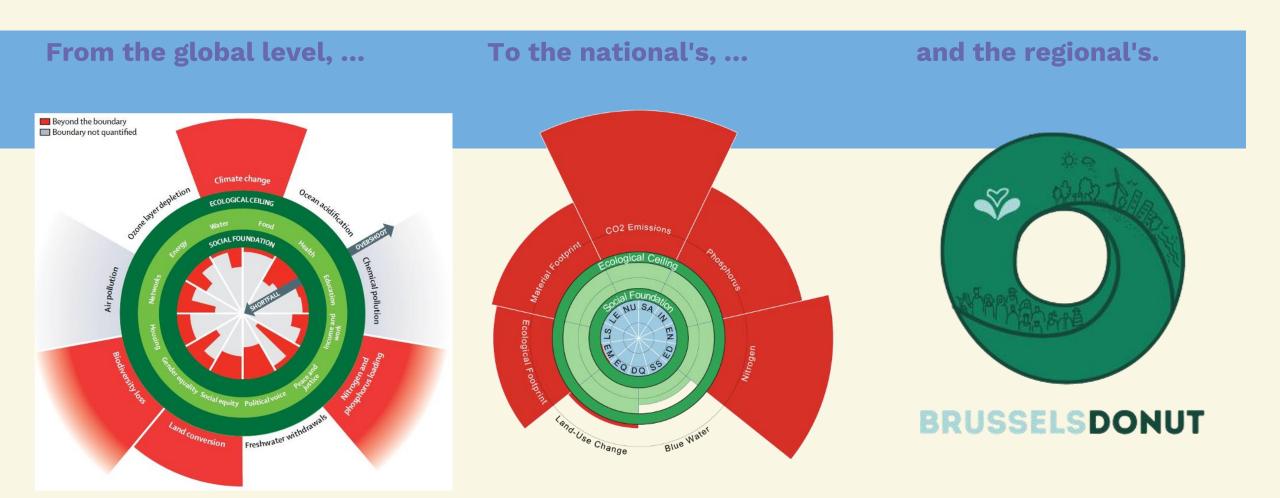


New goal of prosperity and balance





APPLICATION & DOWNSCALING







CONFLUENCES





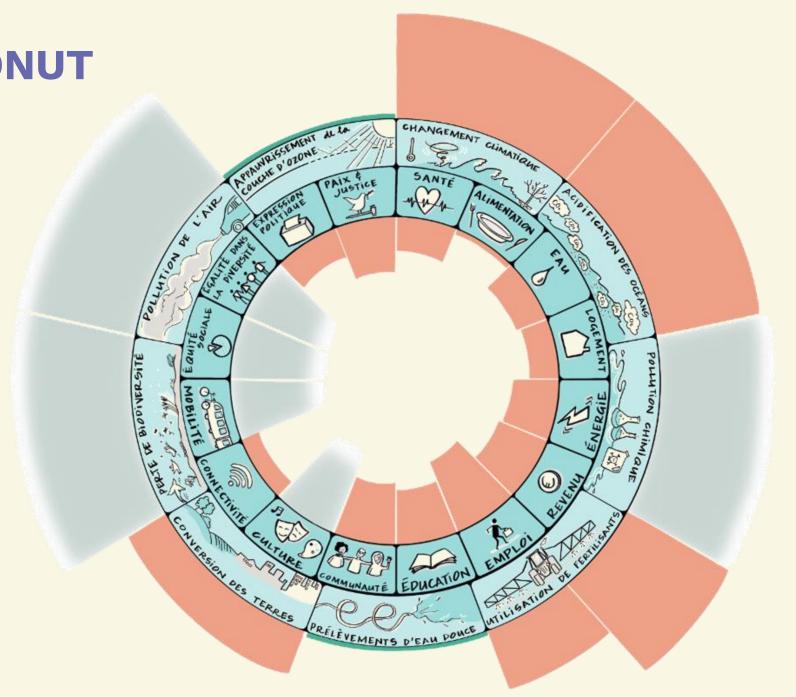
BRUSSELS DONUT

PORTRAIT

LÉGENDE :

LA TAILLE DU SECTEUR ROUGE REPRÉSENTE L'ÉLOIGNEMENT DE LA SITUATION ACTUELLE PAR RAPPORT À LA CIBLE

UN SECTEUR GRISÉ
REPRÉSENTE L'ABSENCE
PE DONNÉES, OU DES DONNÉES
NE PERMETIANT PAS
D'EXPRIMER LA SITUATION
PAR PAPPORT À UNE CIBLE

























shifting economy.brussels ❖

ENSEMBLE, VERS L'ÉCONOMIE DE DEMAIN SAMEN OP WEG NAAR DE ECONOMIE VAN MORGEN









THANK YOU FOR YOUR ATTENTION!















The NANAIMO DOUGHNUT ECONOMICS FRAMEWORK

Municipal Challenges

- Lack of Vision
- Lack of Coherence
- Misguided Frameworks
- Poor Communication

Coherence: The quality of forming a unified whole

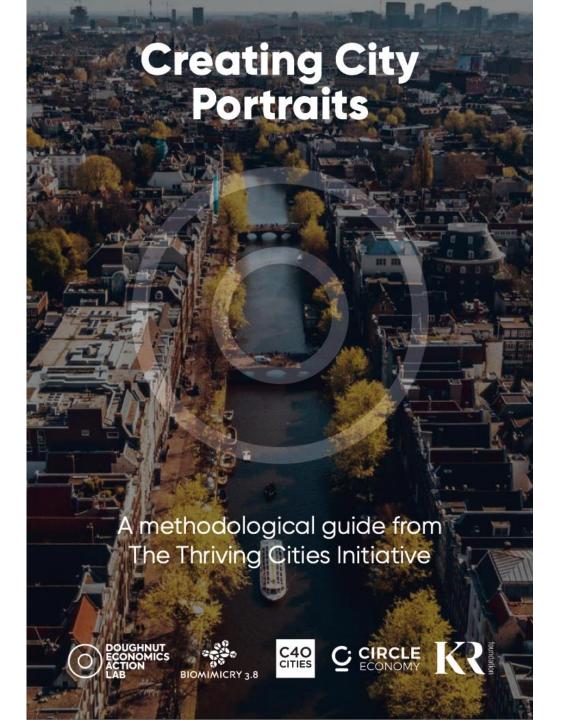
"Just as an equalizing tuning system permitted twenty-four different musical scales to integrate and to influence one another for the first time—so cities need a framework to unify their many disparate programs, departments, and aspirations...When a community has a vision, and a plan for how to carry it out, and is able to coherently integrate its disparate elements, then it begins to be well tempered. Coherence is essential for cities to thrive."

-Jonathan F.P. Rose (The Well Tempered City)

Effectively coordinating: Action to achieve shared goals

Frameworks:

- Communicate a clear vision, purpose and direction;
- They are aspirational, organized around objectives; and
- They include key performance indicators to assess progress.



Breakout Room Links

ROOM 1: ENABLED (Economic Health) jobs, income, tourism, energy How We Work

> ROOM 2: HEALTHY & > **EMPOWERED**

(Environment) housing, water, food (Governance) peace, equity, diversity How We Care

ROOM 3: CONNECTED →

(Livability) mobility, community, neighbourhoods How We Live & Move

ROOM 4: CONNECTED → (Livability) well-being, culture How we Connect, Recreate & Get Outside

ROOM 5a: ECOLOGICAL CEILING air quality, biodiversity, chemical pollution, climate change How We Adapt & Stay Green

ROOM 5b: **ECOLOGICAL CEILING** land health, ocean health, soil and waterway health, waste, water resources How We Adapt & Stay Green

LAND HEALTH / LAND USE

preliminary goal: so our lands and waters are healthy and cared for / managed sustainably

Background

- · RDN Regional Growth Strategy measures:
- · amount of land in protected areas
- diversity of land use (ratio) inside the Growth Containment Boundary Number of new lots / units created through subdivision inside and outside the Growth Containment Boundary
- Number of perceis with Ferm Status
- Amount of land classified as Private Managed Forest Land
- · 1998 / 2006 Progress Nanaimo measured:
- land area inside and outside the UCB to review adjustments.
- to the urban containment boundary nonulation inside and outside the UCS
- Total area of Rural Resource Land designation
- Land uses in Rural Resource Land designation

Proposed REIMAGINE NANAIMO Indicators · identifies the proportion of % of protected ESAs identified ESAs that are / · through GIS analysis are not protected · may consider different . ESA include: levels of protection (e.g., · Coastal Bluff parks vs. private lands · Wetlands protection) · Watercourse / Riparian Cultural some baseline data from · Terrestrial herbacious component 1998 / 2006 available · Older second growth hand in hand with environmenta Reclaim . tells us how much land in . % of protected ESAs concrete an total is within a protected · through GIS analysis gray areas area designated by the · With limited undeveloped regenerate federal, provincial, or local land in the City, indicator is government unlikely to shift much more. City's role in land protection at the regional level may be more critical Baseline: 1.785 ha (2019) an increase from 1.687 ha (2018)

- · helps to track where new growth and population is occurring with respect to the urban containment boundary
- · ha inside / outside UCB · population inside / outside LICE
- · already being monitored for RDN Regional Growth Strategy

COMMENTS / QUESTIONS ON THIS GOAL

Useful, but

stormwater generated /





- · helps to understand the mix of land uses being developed within the urban containment boundary
- · ratio of land uses . through GIS analysis
- · no baseline identified

Maybe a useful item: Land outside the UCB that can support local agricultural production for food security. Flip this one around a bit.

e.g. preserve rural/forest/na tural areas

outside UCB





waterresources air quality OGICAL CEILING waterway health NANAIMO To Social Foundations Will Thing FCOLOGICAL CEILING land use and land health

THE OUTER CIRCLE

The outer limits represent our ecological ceiling. Respecting ecological boundaries means living within our means, minimizing the harm we do to our natural environment, and maximizing the amount of ecological benefit we give back.

THE INNER CIRCLE

The inner limits represent our social foundations that are needed for the people of Nanaimo to thrive. Improving our social foundations means addressing shortfalls and creating opportunity for all.

THE CENTRE

chemical pollution

The middle is the "sweet spot", representing the space we wish to occupy. It is where we are meeting the needs of all while respecting the limits of our environment. This is where we will thrive.





Water Resources: so everyone has access to clean drinking

water and we pres	erve this resource	for future generation
Draft Indicator	Droft Torget	Pasalina (if kna

Water Consumption by Residents

» New target to be set 206 litres / capita / day as previous target was

exceeded

Waste: so we use our resources sustainably

Draft Indicator	Draft Target	Baseline (if known)
Household Waste Sent to the Landfill	 By 2030 150 kg / household /yr By 2040 120 kg / 	191 kg / household / year (2019)

household / yr » By 2050 100 kg / household / yr

Soil and waterway health: so our lands and waters are healthy and cared for / managed sustainably

Draft Indicator	Draft Target	Baseline (if known)
Number of Water Samples	» Reduced number of	TBD

at Monitored Sites Meeting BC Water Quality Guidelines

samples that fail to meet guidelines

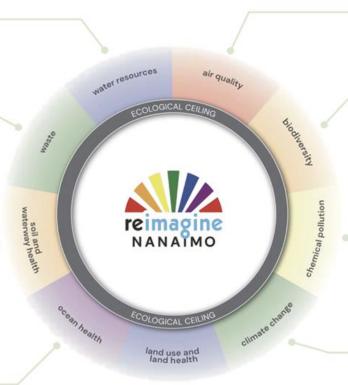
Ocean health: so our lands and waters are healthy and cared for / managed sustainably

	NOTE THE CONTRACT OF THE CONTR	
Draft Indicator	Draft Target	Baseline (if known)

at Monitored Sites Meeting BC Water Quality Guidelines

Number of Water Samples » Reduced number of samples that fail to meet guidelines

TBD



Air quality: so everyone has good quality air to breathe

Monitored hourly at the provincial level.

Biodiversity: so our ecosystems are healthy and cared for

Draft Indicator	Draft Target	Baseline (if known)
Area of Lands Dedicated for Natural Area Protection (PRC1-Zoning)	» General: increase» Specific target TBD	2,152 ha

Chemical Pollution: so our lands and waters are healthy and cared for / managed sustainably

Draft Indicator	Draft Target	Baseline (if known)
Number of Water Samples at Monitored Sites Meeting BC Water Quality	» Reduced number of samples that fail to meet guidelines	TBD

Climate change: so the impacts of climate change are minimized for present and future generations

Draft Indicator	Draft Target	Baseline (if known
Community greenhouse gas emissions (tCO2e)	 By 2030 reduce to 50%-58% below 2010 By 2050 reduce to 94%-107% below 2010 	465,000 tCO2e (2010)

Land use and land health: so our lands and waters are healthy and cared for / managed sustainably

nearthy and cared is	or / managed sustai	ilabiy
Draft Indicator	Draft Target	Baseline (if known)
Area of Lands Dedicated for Natural Area Protection (PRC1-Zoning)	 General: increase Specific target TBD 	2,152 ha

REIMAGINE NANAIMO - PHASE 2 BACKGROUNDER - DRAFT | 11



A HEALTHY NANAIMO: COMMUNITY WELL-BEING & LIVABILITY

Element	Draft Indicator	Draft Target	Baseline (if known)
Chronic / Episodic Homelessness	Point-in-time count of people experiencing homelessness	» Elimination of homelessness by 2025	433 (2020)
Rental Housing Affordability	Average rent of a 2-Bedroom Apartment	» TBD	\$1,263 (2020)
Vacancy Rate	Percent of vacancies in rental accommodation	» 3%-5%	1% (2020)
Mix of Housing Types	Proportion of single- family, ground-oriented, and apartment housing types	» TBD	 60% single-family 18% ground-oriented 22% apartment (2020)



Element	Draft Indicator	Draft Target	Baseline (if known
Working Age Population	Percent of population that are of an age likely to be in the workforce (15-64)	» 67% of total population	63% (2020)
Non-Residential Building Permits	Value of commercial and public building permits issued	General: increase Specific target TBD	\$37.5 million (2020)
Ample & Diverse Business Opportunities	Number of total businesses and businesses with employees	» General: increase » Specific target TBD	6,281 businesses with 1+ employees (2020)



so everyone has safe, affordable, and sustainable options to move and to access their daily needs

Element	Draft Indicator	Draft Target	Baseline (if known)
Transportation by Mode	Trips made by different modes of transportation	Modal split by 2041: 12% walking 4% cycling 8% transit 76% vehicle	2016 Modal split: 6% walking 2% cycling 4% transit 86% vehicle
Distance Driven	Average distance driven per person per day	» 10 km per day / person by 2041	14 km per day / person (2011)
Access to Daily Needs	Number of households within a 400 m walk to employment lands, essential services, schools, transit, recreation services, parks, and healthcare	» TBD	 Employment lands: TBD Essential Services: 8% Elementary Schools: 4% Transit: TBD Recreation Facilities: TBD Parks: 71% Healthcare: 5%
Growth in Nodes & Corridors	Proportion of growth occurring in designated growth areas – urban nodes and corridors	» TBD	TBD
Traffic Injury Rate	Number of reported crashes throughout the City	» Vision zero	TBD



AN EMPOWERED NANAIMO: DIVERSITY, CULTURE, AND SOCIAL INTEGRITY

so everyone can thrive and have opportunities to connect and participate in a way that fulfills them

Element	Draft Indicator	Draft Target	Baseline (if known)
Inclusion & Diversity	TBD	» TBD	TBD
Investment in Arts, Culture and Heritage	Dollars being invested into arts, culture, and heritage	General: increase Specific target TBD	TBD
Participation in PRC Programs and Services	Number of people participating in PRC programs and services	 General: increase Specific target TBD 	TBD
Public Waterfront Access	Length of waterfront with public access and number of publicly accessible waterfront features	» Increase	TBD

5 CITY GOALS



A GREEN NANAIMO: **RESILIENT&** REGENERATIVE **ECOSYSTEMS**



A CONNECTED NANAIMO: **EQUITABLE ACCESS &** MOBILITY



A HEALTHY NANAIMO: COMMUNITY **WELLBEING &** LIVABILITY



REPRESENTATION

& INCLUSION

A PROSPEROUS NANAIMO: THRIVING & RESILIENT **ECONOMY**

C5.1

C5.2

Economic Capital

City Plan p. 130

Human, Social, &

City Plan p. 132

City Plan p. 133

City Plan p. 134

Environmental Capital

Business Development

Innovation & Technology

35 CITY PLAN POLICY TOPIC AREAS



Greenhouse Gas Emissions Reduction City Plan p. 28



Connected Communities City Plan p. 56

Integrated Walk, Roll,

City Plan p. 58

Recreational Trails

City Plan p. 61

Cycle, & Transit Network

C2.2



Community Safety & Security City Plan p. 72



Affordable Housing City Plan p. 75



Intergenerational Living City Plan p. 79



C4.3 Access for All City Plan p. 103

Truth & Reconciliation

City Plan p. 97

Equity & Inclusivity

C4.2

Plan p. 101



C4.4 Political Voice & Engagement City Plan p. 106



C4.5 Culture City Plan p. 108



Place Making & Investment Attraction



City Plan p. 135 C5.6



Public Art Projects & Programs City Plan p. 113



C4.8 Community Events, Festivals, Tournaments, & Gatherings



Parkland & Park Amenity Management City Plan p. 117

City Plan p. 115



C4.10 Waterfront Use & Protection City Plan p. 121



C1.2 Climate Adaptation & Hazard Mitigation City Plan p. 34



Urban Tree Canopy, Natural Areas, & Greenways



City Plan p. 39

Water, Sewer, &

City Plan p. 41

City Plan p. 44

Stormwater Services

Solid Waste Management

C1.5

Safe Mobility (Vision Zero) City Plan p. 63



Complete Streets City Plan p. 64



Emergency Management City Plan p. 83



Recreation, Culture, & Wellness







City Plan p. 85



















C1.8 Artificial Lighting & Dark Skies City Plan p. 47

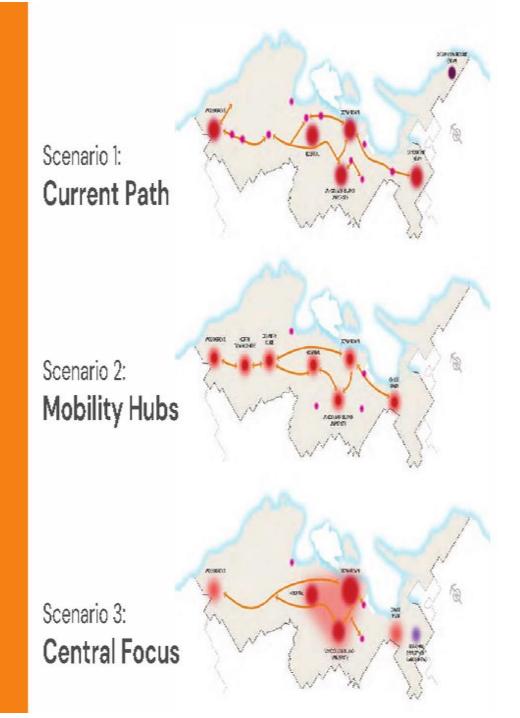


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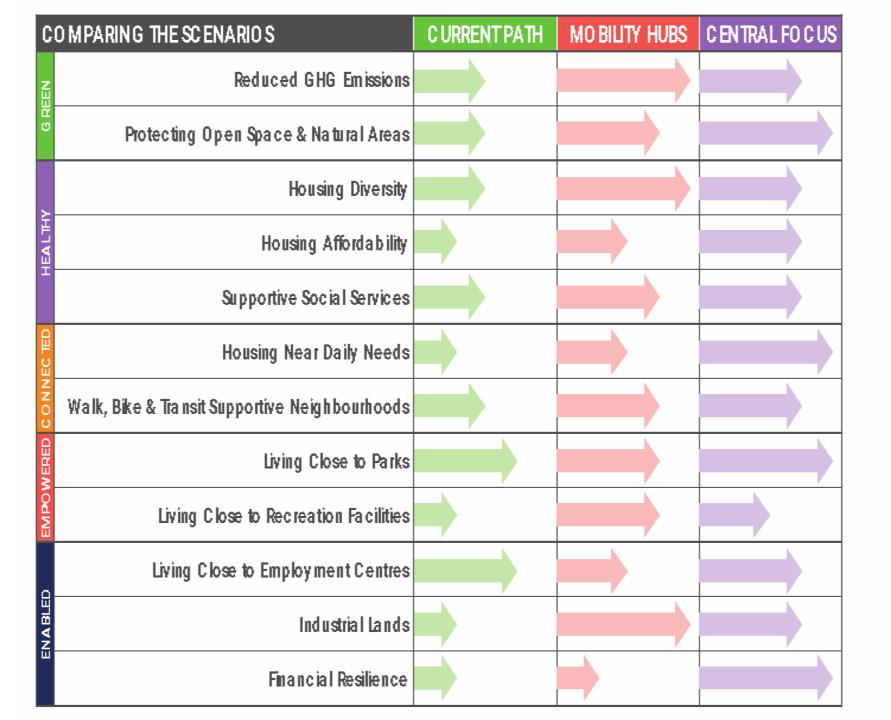
ONE UNIFYING FRAMEWORK III FIVE DRAFT STRATEGIC GOALS



Three Preliminary Scenarios

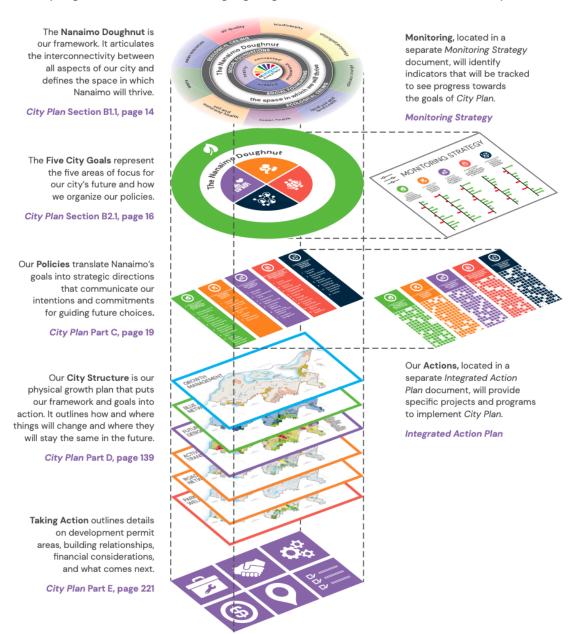




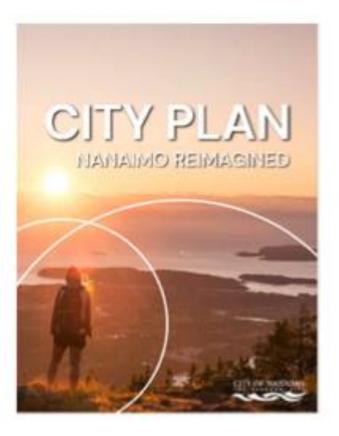


HOW IT FITS TOGETHER

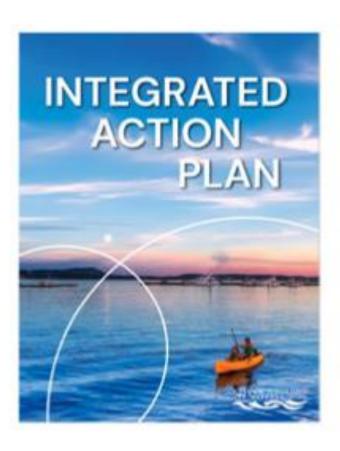
City Plan - Nanaimo Relmagined combines existing policies and actions, incorporates new information, and lays a groundwork for a future of ongoing integration. Below are the elements that form City Plan.



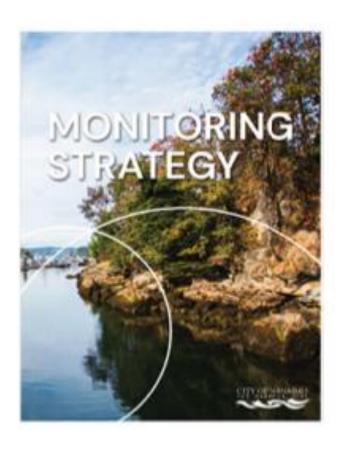
Adopted July 4, 2022



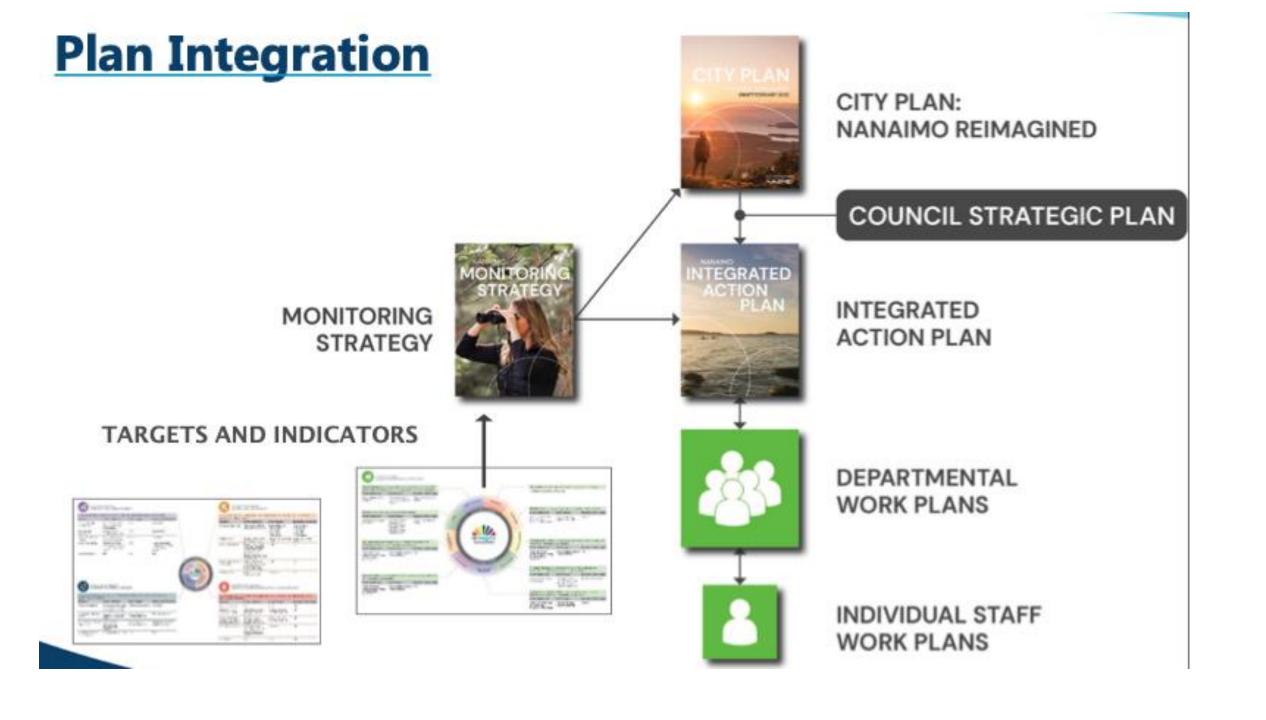
Spring 2023



Summer 2023



A GREEN NANAIMO		
Ref.	Programs & Projects	Connected City Plan Policies
GREENHOUSE GAS EMISSION REDUCTION		
ONGOING (Ongoing & Repeated)		
1	Update corporate policies for City owned facilities to reflect current and future energy and Greenhouse Gas emissions reduction requirements and other green building practices.	► C1.1.5
IMMEDIATE (O - 4 Years)		
² *	Advocate to the Province of BC for a moratorium on all new natural gas connections and discourage fuel switching.	► C1.1.7
³ \$	Confirm final steps with respect to Nanaimo's Step Code implementation strategy, to ensure higher step code compliance requirements come into effect before the Provincial mandated implementation timelines.	► C1.1.8
⁴ \$	Complete an inventory of energy use and Greenhouse Gas emissions of all community buildings, to identify building energy upgrade opportunities and challenges by building type. Depending on results, develop a financing program for home energy upgrades.	► C1.1.5
5	Update development permit requirements to include energy, climate, and water efficiency from a site and building design perspective. Develop guidelines that may include passive design techniques, shading, rainwater management, green roofs, building orientation, Water Wise landscape, building energy systems and renewable power generation, among other topics.	► C1.1.8
6 \$	Conduct a City fleet electrification study.	► C1.1.9
CLIMATE ADAPTATION & HAZARD MANAGEMENT		
IMMEDIATE (O - 4 Years)		
7	Use a climate risk and vulnerability assessment method to be used for reviewing large capital infrastructure investments in the city (e.g., a Public Infrastructure Engineering Vulnerability Committee (PIEVC)).	► C1.2.7
8	Develop a Green Shores strategy to help naturalize the shoreline to protect waterfront properties from flood risk and landslide, while also protecting and restoring habitats.	► C1.2.6





THANK YOU



CIRCULAR ECONOMY IN AMSTERDAM

Juan-Carlos Goilo Circular Innovation Lead Municipality of Amsterdam

CCRI Webinar, Vancouver May 2nd 2023





Amsterdam introduction

■ 746 years old

Inhabitants: 872.497

Houses: 449.982

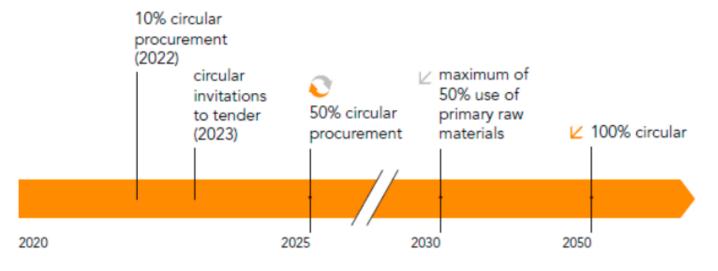
■ Budget: 6,9 billion euro





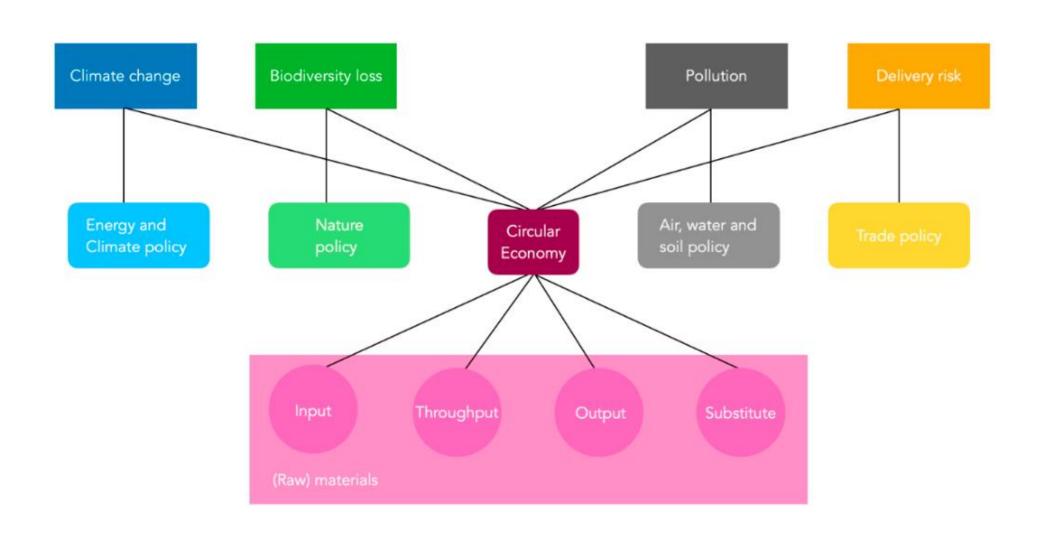
Amsterdam sustainability goals

- CO2 reduction goals compared tot 1990: 55% in 2030, 95% in 2050
- Circular goals: 50% less raw materials in 2030, circular in 2050





But circular economy is embedded in every aspect of society





Learning by doing





CIRCULAR STRATEGY FIRST TO BE BASED ON THE DOUGHNUT

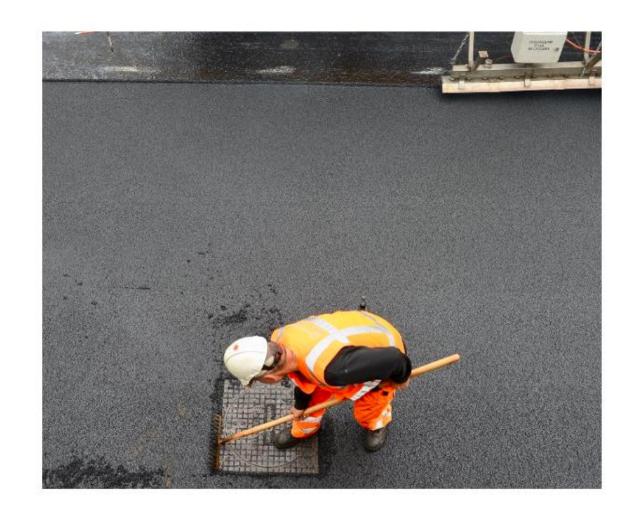




Our approach: We learn by doing.

We follow two approaches in implementing our ambitions:

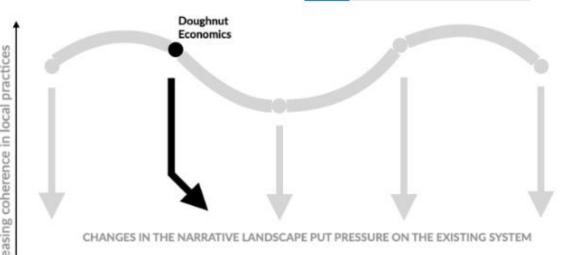
- Top-down: as a municipality, we indicate what we want to achieve and how we want to get there.
- Bottom-up: we give room to circular projects and initiatives to accelerate and scale up.





Regime

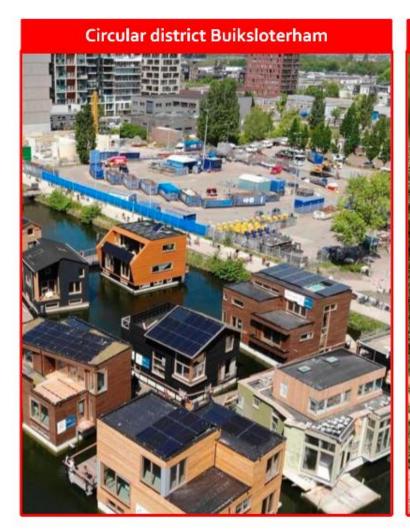
Landscape



consumer investments preferences culture skills policy science HOMEOSTASIS ADJUSTMENTS OCCUR OF INITIAL SYSTEM IN THE SYSTEM **CHANGE IN CONFIGURATIONS** IN THE SYSTEM CREATED BY INFORMATION FROM THE MONITOR MONITOR AS LEARNING AND EXPERIMENTAL ACTVITY: SMALL NETWORKS OF ACTORS SUPPORT INNOVATION ON THE BASIS OF EXPECTATIONS AND VISIONS.



Regenerative by design – examples in the built environment

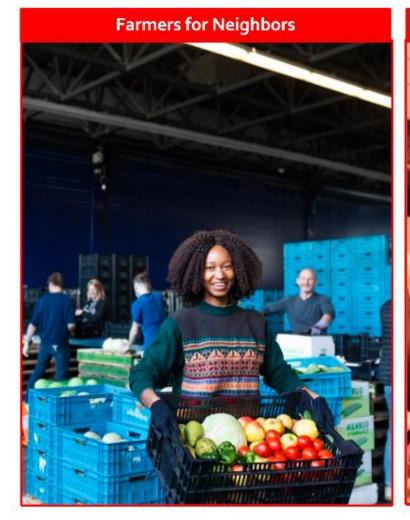




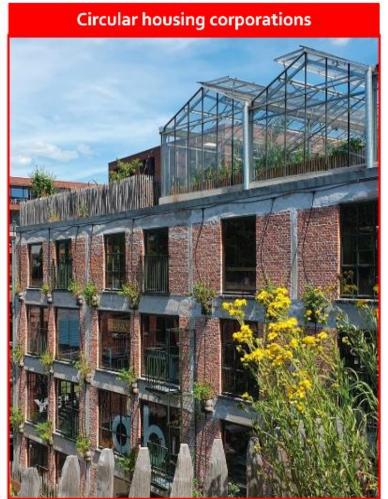




Distributive by design (examples)









Fair and circular clothing





Challenges beyond our circle of influence

- Legislation on value streams like textile and construction materials
- Extended producer responsibility
- Green tax shift





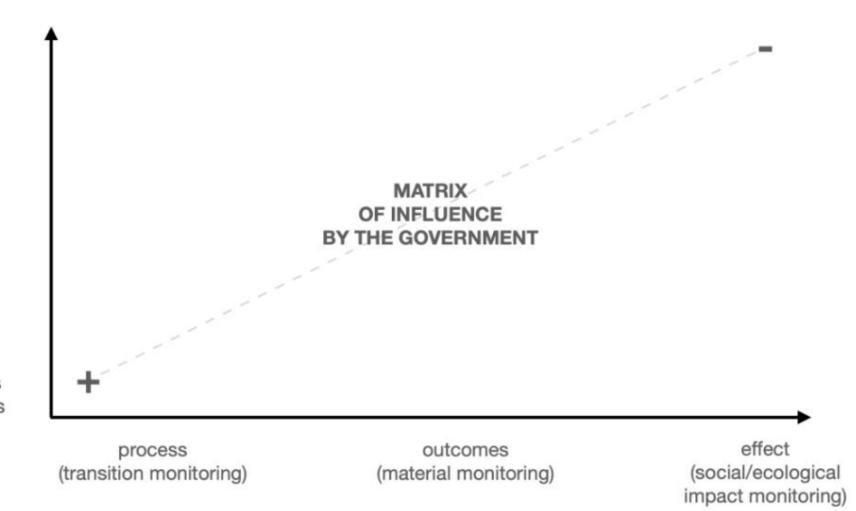
Types of monitoring

ABSTRACTION LEVELS OF MONITORING

high-level (strategic) monitoring goals

sector-specific (tactical) monitoring goals

monitoring specific projects and interventions





THANK YOU / MERCI!

Reach out to explore opportunities to get involved with the CCRI: info@canadiancircularcities.ca

Contactez-nous pour explorer les possibilités de vous impliquer dans le projet VRC: info@villesetregionscirculaires.ca

www.canadiancircularcities.ca / www.villesetregionscirculaires.ca









