Financing Sustainable, Climate Neutral Cities – The business case

16th November 2020
14:30-16:00 CET
Welcome!

There is no lack of sustainable, climate friendly and smart technologies, but there seems to be challenges to implement and upscale them in city structures. Could finance be a barrier?

- **November 2\textsuperscript{nd}:** Selected cities shared their experiences, progress and challenges in developing a sustainable, climate neutral city; with a specific focus on the financing need and potential solutions
- **November 9\textsuperscript{th}:** Different private financial institutions providing their perspectives picking up from the needs expressed in the previous workshop
- **November 16\textsuperscript{th}:** Focus on tools and funding mechanisms to meet the financial needs of cities to become more sustainable
- **Now:** the business case and looking forward
- **We** (SEI, Cleantech Scandinavia and SSE-SIR Misum) - Viable Cities’ Finance project (2020-2022), funded by Viable Cities

#SustainableCities #SmartCities
Our panelists today

- JULIO LUMBRERAS; Mission Board for Climate Neutral and Smart Cities
- ROBERT WESTERDAHL; Partner at Material Economics
- JORN VERBEECK; Head of Research and Innovation at Global Covenant of Mayors for Climate & Energy (GCoM)
- ALICE CHARLES; Lead, Cities, Infrastructure & Urban Services, World Economic Forum
- ROLAND HUNZIKER; Director, Sustainable Buildings & Cities, World Business Council for Sustainable Development (WBCSD)
- LIISA RAASAKKA; Head of the EIB Group Office for Sweden
**Agenda**

**14:30 Introduction to the session and recap of previous sessions**
- Fedra Vanhuyse, Head of Societal Transitions – Senior Research Fellow at Stockholm Environment Institute

**14:40 Presentations from guest speakers**
- Robert Westerdahl with an overview of cities’ financial needs
- Jorn Verbeeck on Global cities and Citizens as agents of change
- Liisa Raasakka on the role of public banks
- Roland Hunziker on Innovation in business models and conditions to attract business investments
- Alice Charles on the effect of COVID-19: rethinking traditional revenues and financing mechanisms to deliver sustainable cities
- Julio Lumbreras on the Mission board’s proposed instruments to leverage investments/funding

**15:20 Q&A session between moderator and panellists; selected questions from the audience**

**15:55 Concluding remarks**
- Fedra Vanhuyse
House rules

- Use the Q&A chat function to post your questions for the Q&A session at 14:00 CET
- Please state your name and organization/country
- Be short and clear
Recap from the previous sessions
Our panelists

THE CITY PERSPECTIVE
• Gustaf Landahl, Head of Department of Planning and the Environment, City of Stockholm;
• Frans-Anton Vermast; Senior Strategy Advisor Low Carbon and Connected Urban Planning, Amsterdam City
• Bud Braughton; Smart Columbus Project Manager
• Serge De Gheldere; Lead at Futureproofed & Klimaatzaak; Member of the Board and Executive Committee of Leuven2030

THE PRIVATE FINANCIERS’ PERSPECTIVE
• Carl-Emil Lindholm, Director, Infranode
• Heimen Visser, Fund Manager, PrimeVest Capital Partners
• Helena Olin, Head of Real Assets, AP2
• Kristoffer Aanerud Nielsen, Advisor, Climate & Sustainable Finance, SEB

FUNDING MECHANISMS
• ALANUS VON RADECKI, Head of Competence Team Urban Governance Innovation at the Fraunhofer Morgenstadt Initiative
• ISABELLA LONGO, Project Director (BIT Habitat) at Barcelona City Council
• LIZA ROSE CIROLIA, Senior Researcher at the African Center for Cities
• MAYUR MUKATI, Senior Associate Sustainable Finance Solutions at Sustainalytics
• WILL SIBIA, Founder at URBS
Discussion points from previous sessions

Overall:
1. Large investment need to become climate neutral (e.g. new infrastructure and refurbish infrastructure built in the 60’s- 70’s)
2. National legislation needed to push the sustainable agenda at city level. Be bold: asking for forgiveness instead of permission when it comes to implementing the sustainability agenda
3. Sustainability: environmental and social -> coherent impact investment framework for investing in cities lacking (including direct and secondary impacts); need to look at job creation also

Different incentives and ways of working:
1. **Current investment portfolio vs additionality**: LGs focus on existing financing needs and existing costs vs. private financiers looking for new investment opportunities. LGs need to balance the accounts. However, private financiers could help LGs to find new revenue streams from investments by assessing future functionalities of assets
2. **Return on investments**: LGs (especially AAA-rated ones) vs. private financiers (look for risk return)
3. **Partnership and ownership of assets**: LGs owning and controlling the assets/ doing everything on their own vs. collaboration with private investors. Different cities have different levels of competency. Incentive needed for LGs to step into special purpose vehicle/ neutral entity facilitator that contracts all partners. Are LGs facilitator in scaling pilots or do they have another role? Not a lot of cities are ready to pull together large partnerships for the investment scale needed

Way forward could be…:
1. **Public procurement**: LGs have quite substantial budgets; is an instrument to channel investment – aside from bonds or loans or grants
2. **For cities with lower credit worthiness/ investments with low return**: pooling investment for the cities themselves; or for declining and rural cities: help from bigger cities, get back-up from public banks?
3. **Regulatory holiday for pilot projects**?
Today’s panelists
Robert Westerdahl

Partner, Material Economics
Financing the climate transition for cities

Robert Westerdahl
Climate neutral Transport, Buildings and Electricity by 2030

CO₂ reduction per area to 2030 for city of 100’000, excluding scope 3 emissions

Kton CO₂ per year

2018 2030

Transport Electrification, public transport, active mobility, remote working
Buildings and heat Buildings renovation, heat-pumps, solar heating, zero emission district heating
Electricity Rooftop solar, utility-scale wind, solar, electricity storage, grid investments

Source: Material Economics modelling
Additional investments needed of €10’000 per citizen

Total additional investment need for a city with population of 100’000, by sector

Million €, investments 2020-2030

- Transport: 243
- Buildings: 516
- Heating: 88
- Electricity: 114
- Total: 961

About €10'000 per citizen

Source: Material Economics modelling
Climate action can yield a positive economic case

The economic case for climate neutrality for a city of population 100’000

Million €, Net Present Value, 2020-2050

Investments | Energy savings | Health savings

Transport Buildings: -240
Buildings: -520
Heat: -90
Electricity: -11
Fuel costs: +300
Buildings energy need: +250
Heat generation: +100
Electricity generation: +250
Air quality: +170
Physical activity: +90
Noise, road accidents: +50
Total: +260
Cities represent only 17% of the investments needed – they need to catalyze and accelerate the change required across all stakeholders.

<table>
<thead>
<tr>
<th></th>
<th>Estimated investments per stakeholder</th>
<th>Cost savings per stakeholder</th>
<th>Savings versus investments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of total investments</td>
<td>% of total savings (energy and health costs)</td>
<td></td>
</tr>
<tr>
<td>Cities</td>
<td>17%</td>
<td>6%</td>
<td>-61%</td>
</tr>
<tr>
<td>Citizens</td>
<td>31%</td>
<td>46%</td>
<td>+70%</td>
</tr>
<tr>
<td>Property owners</td>
<td>35%</td>
<td>16%</td>
<td>-45%</td>
</tr>
<tr>
<td>Public Transport Authority</td>
<td>4%</td>
<td>7%</td>
<td>+81%</td>
</tr>
<tr>
<td>Utilities</td>
<td>12%</td>
<td>12%</td>
<td>+10%</td>
</tr>
<tr>
<td>Healthcare providers</td>
<td>0%</td>
<td>13%</td>
<td>+++</td>
</tr>
<tr>
<td>Total</td>
<td>961</td>
<td>1221</td>
<td>+19%</td>
</tr>
</tbody>
</table>
Thank you!

Robert Westerdahl
Partner, Material Economics

robert.westerdahl@materialeconomics.com
Jorn Verbeeck

Head of Research and Innovation at Global Covenant of Mayors for Climate & Energy (GCoM)
Financing Sustainable, Climate Neutral Cities
The Business Case

Jorn Verbeeck, Head of Research & Innovation, Global Covenant of Mayors, for Climate and Energy (GCoM), Brussels, Belgium

#Innovate4Cities @Mayors4Climate
All experiences are different! This is a path of reference that you can adapt to your own situation.
From R&I priorities to actionable knowledge

Cities and Climate Change Science Conference Edmonton, 2018

Gaps by Topical areas
- Informality
- Urban Planning and design
- Built and blue/green infrastructure
- Sustainable production and consumption
- Finance
- Uncertainty

Gaps in Cross Cutting Issues and Knowledge Gaps
- Systems approach
- Governance and Institutions
- Scale
- Observation, data, modelling, scenarios – city scale

Gaps in Delivery Approaches
- Knowledge co-design and co-production
- Empowering cities to take action
- Fostering long-term science-policy-practice collaborations
### Key entry points for city action:
- Urban planning and design
- Buildings
- Energy and transportation
- Waste, water, and food

### Policy and finance instruments:
- Access to finance and de-risking investments
- Multilevel governance dynamics (e.g., vertical integration)
- City climate action commitments, progress, and incentives
- Public procurement methods to prioritize sustainability

### Evidence and tools for city action:
- Innovation and measuring innovation
- Data aggregation
- Emissions forecast
- Communications and stakeholder engagement processes

### City context:
- Resilience and adaptation strategies
- Vulnerable communities and informal settlements
- Governance landscapes
- Intermediary cities

### City DNA & building blocks:
- City narrative: resilient cities, smart cities, doughnut cities, NBS, …
- Window of opportunity
- Citizens as asset holders in terms of data (bottom-up), knowledge (co-creation), buildings (performance), finance (pension funds, green combo funds), …

### Tailormade approach:
- Supply & demand are important
- City power and capability: (de)centralized approaches
- Phase of the climate action journey

### Importance of data & language:
- Insight in what priorities & opportunities are
- Who has which data and which data architecture allows moving forward
- Whether all actors understand each other (e.g., procurement)

### Iteration, dissemination, accelerating, scaling:
- Mastering the mission and the matrix
- Co-benefits as a standard
- ‘Pilots’, barriers, enablers
- Peer-to-peer approaches
- Learning network
- Multi-stakeholder partnerships
- Governance
- Leapfrogging
ZERO WASTEWATER WITH RECOVERY OF ENERGY & NUTRIENTS

- 2500 MWh wasteheat
- 30,000 m³ water
- 1.500kg green fertilizer

2/3 process heat
Christeys

1/3 from wastewater
Liisa Raasakka

Head of the EIB Group Office for Sweden
Smart City Business Forum 2020
Financing Sustainable, Climate Neutral Cities, 16th of November 2020, 14.30-16.00

Liisa Raasakka
Head of Stockholm EIB Group Office, EIB
What is “inside” the EU Urban Agenda?

<table>
<thead>
<tr>
<th>Inclusive Cities</th>
<th>Green Cities</th>
<th>Smart Cities</th>
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</thead>
<tbody>
<tr>
<td>• Jobs and skills in the local economy*</td>
<td>• Sustainable use of land and Nature-Based solutions*</td>
<td>• Urban mobility*</td>
</tr>
<tr>
<td>• Urban poverty</td>
<td>• Circular economy*</td>
<td>• Air quality*</td>
</tr>
<tr>
<td>• Housing*</td>
<td>• Climate adaptation*</td>
<td>• Digital transition</td>
</tr>
<tr>
<td>• Inclusion of migrants and refugees*</td>
<td>• Energy transition*</td>
<td>• Innovative and responsible public procurement</td>
</tr>
<tr>
<td>• Cultural heritage*</td>
<td></td>
<td>• Security*</td>
</tr>
<tr>
<td>*= Partnership in which EIB active</td>
<td></td>
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</tr>
</tbody>
</table>

1. **The Priority Themes and Partnerships**
2. **The agenda for action:** Better Funding, Better Knowledge, Better Regulation
3. **The calls for action:** In the Pact of Amsterdam, Ministers invite EIB to:
   - Help develop better funding approaches in the urban context
   - Contribute to the Partnerships especially better funding and better knowledge.
   - Reflect, where relevant, the outcomes of the Urban Agenda for the EU in its urban lending, grant-loan blending and advisory services

*(New Leipzig Charter of December 2020, promotion of integrated urban development approach with special emphasis on deprived urban neighbourhoods)*

=> Urban lending now a mainstream investment area under EIB public policy goals in areas of cohesion, infrastructure, environment, climate action.
EIB urban lending

- EUR 150 bn of urban lending 2012-18
- EUR 50 bn urban climate finance 2012-18
- Urban is approx 1/3 of total EIB lending
- 40% of climate lending
- EUR 14 billion outside EU 2012-18

Smart City Approach

- Urban Lending 2012-2018 = EUR 152 bn
  - Urban Development
  - Urban Mobility
  - Water and Sewerage
  - Education
  - Industry and Services
  - Telecommunications
  - Health
  - Solid Waste
  - Energy
  - Other
Public Banks: Rationale

- Cities are responsible for a major share of public investment and crucible for innovation – huge scope
- Public banks have a huge role in financing municipal investment in Europe. They often have strong credit ratings on which basis they can raise funds on the capital markets and make them available at long maturities and with attractive pricing to cities.
- EIB invests alongside and considers them essential partners. Common urban agenda public policy goals – catalytic role
  - National public banks can leverage EIB funding to reach smaller towns
  - National public banks have country and sector knowledge can combine with EIB international experience in synergy
  - National public banks can co-finance or co-invest
  - Potential synergies in providing urban advice
- EIB is also working together with public sector banks to foster common principles and approaches – for example we set up a Joint Initiative on Circular Economy (JICE) to aim at developing common principles for circular economy financing.
Looking ahead: the EIB Group as the EU Climate Bank

1. From billions to trillions. EIB Group will aim to help unlock at least EUR 1 trillion of investment for climate action & environmental sustainability by 2030.

2. Increasing EIB’s own financing for climate action and environmental sustainability to a share of 50% for by 2025.

3. Aligning all the EIB Group’s financing activities with the principles and goals of the Paris agreement by the end of 2020.

EIB has launched its Climate Bank Roadmap guide activities 2021-2025
## Pandemic resilience and city climate co-benefits

<table>
<thead>
<tr>
<th>Theme</th>
<th>Investment</th>
<th>Pandemic Resilience Benefits</th>
<th>Climate Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall urban resilience</td>
<td>Multi-sector resilience planning-led investments</td>
<td>• Enhance resilience to pandemics across multiple sectors</td>
<td>• Enhance climate adaptation and reduce vulnerability to key climate risks</td>
</tr>
<tr>
<td>Sustainable urban development</td>
<td>Urban regeneration, slum upgrading, multipurpose public spaces, greening</td>
<td>• Enhance possibilities for social distancing in the public space</td>
<td>• Resource efficiency, adaptation measures</td>
</tr>
<tr>
<td>Air quality</td>
<td>Investments in air pollution reduction from industry, housing, public transport, heating and cooling</td>
<td>• Correlation between COVID-19 and air quality impacting respiratory system etc.</td>
<td>• CO₂ reduction through increased efficiency</td>
</tr>
<tr>
<td>Waste management</td>
<td>Investments in recycling, circular economy, improved waste management</td>
<td>• Improved hygiene and sanitation</td>
<td>• Resource efficiency improvements and reduced emissions from incineration and landfills</td>
</tr>
<tr>
<td>Sustainable mobility</td>
<td>Public and non-motorized transport</td>
<td>• Improving sanitation of public transport, reduced crowding, cycling</td>
<td>• CO₂ reductions from vehicle emissions</td>
</tr>
<tr>
<td>Water supply and wastewater</td>
<td>Investments in water supply and sewerage</td>
<td>• Improved sanitation, hygiene</td>
<td>• Energy savings e.g. reduced pumping costs, water resource efficiency</td>
</tr>
<tr>
<td>Affordable housing</td>
<td>Climate-smart (e.g. EDGE compliant) housing</td>
<td>• Reduce overcrowding, facilitate isolation,</td>
<td>• Energy efficiency improvements, CO₂</td>
</tr>
</tbody>
</table>
Climate and Pandemic Co-benefits – Examples

**Milan – Air Quality**

**Barcelona - Distancing**

The Superblocks Plan *(increase of pedestrian and open/green areas)* regenerates neighborhoods, promotes walking/cycling, reduces air pollution, and provides more space for social distancing in response to COVID-19.
Alice Charles

Lead, Cities, Infrastructure & Urban Services, World Economic Forum
New York Pre-COVID Agreed City Budget

- **Programs**
- Public Safety
- Education, Libraries
- Social Services
- Environmental Protection
- Transportation Services
- Parks, Recreation
- Housing
- Health
- Rents from civic properties

- **Taxes**
  - Real Estate Taxes
  - Sales and Use Taxes
  - Personal Income Taxes
  - Other Taxes
  - Investment Income
  - Grants contribution

**Revenue** $95.8 B

**Deficit** $1.7 B

**Expenses** $97.5 B

- **Basic Services & Programs**
  - Public safety
  - Community development
  - Community services
  - Public works
  - General administration

Source: Independent Budget Office of the City of New York
New York Projected Budget Deficit due to COVID-19

- 4 billion revenue lost from public transit, toll revenues, taxes (6.7 billion in 2021, -10.5%) and pension investment loss depending on ROI.
- 12.2% drop in real property transfer taxes

Deficit
$8.078 B

Expenses
$97 B

Revenue

* Source: Independent Budget Office of the City of New York
And yet Cities need to deliver Climate & Resilient Infrastructure

- Cities account for the majority of the world’s population and carbon footprint. Achieving carbon neutrality and building towards sustainability will require a collaborative and systemic approach to climate mitigation and adaptation financing with the consideration of social justice in these actions.

**Required Transformations**

- New standards for systemic efficiency will drive the design of new **buildings** and retrofit of existing building stock to reduce energy and health burdens of disadvantaged population and meet future environmental and health outcomes.

  - Updating **power networks** and transitioning to **renewable sources** in a socially equitable manner will transform the **urban energy supply**, while advances in technology will unlock demand and supply for alternate fuel sources.

  - Investment in **mass transit, alternative modes of transportation, and electrifying mobility** will democratize access, while advances in technology will change public preferences and behavior.

  - Update of aging water systems and expanding water service to underserved population will enhance supply-side efficiency and integrated management can optimize use of **water resources** in stressed environments.

  - Increasing urban resource efficiency requires **circular supply chain** to divert and reduce waste, while technological advances can improve safety and sustainability of management, treatment, and disposal.

**Potential Technical Solutions**

- Improve efficiency of building fixtures and subsystems: lighting, heating, cooling, ventilation, water

  - Local, low-carbon, renewable energy

  - District energy systems (thermal & electric)

  - Distributed generation (solar, thermal)

  - Centralized generation (solar, wind, tidal)

  - Smart grids, micro grids, and localized storage capacity

  - Mass transit solutions (rail and BRT)

  - Infrastructure to promote biking and walking

  - Electrification of personal, public, and fleet vehicles

  - Smart mobility, autonomous vehicles, and sharing economy

  - IoT technology for smart systems management and treatment optimization

  - Water reuse within closed loop building systems

  - Green/Blue infrastructure to manage stormwater

  - Integrated water management to support diverse land use

  - Circular management of diverse waste streams

  - Waste-to-energy systems

  - Enhanced material sorting and recycling

  - Nutrient recycling through treatment byproduct
What cities must do to attract finance?

Financial institutions have made bold and welcomed commitments to Environmental, Social and Governance (ESG), pledging to accelerate climate, socially responsible and mission-oriented financing, which creates an opportunity for cities.

The Coalition for Urban Transition estimates that the investments required to reduce urban emissions by 90% would be US$1.83 trillion (about 2% of global GDP) per year, but this would generate annual savings worth US$2.80 trillion by 2030 and US$6.98 trillion by 2050.

A lack of available finance is not the critical inhibitor for investment. Inadequate policy, bureaucratic hurdles, undeveloped technical expertise, governance and institutional systems for developing projects are some of the major barriers that prevent funding at scale.

Financial institutions advise that there is a lack of ‘bankable projects’, that is projects with a structure and risk profile in line with financers expectations. If financiers are not satisfied with the structure and risk/return profile of a project, they will either not invest or ask for risk mitigation measures, which can add to the project costs.

Cities will need to collaborate with financiers, to build the capacity to deliver projects that are bankable and capable of being financed at scale.
Roland Hunziker

Director, Sustainable Buildings & Cities, World Business Council for Sustainable Development (WBCSD)
Financing Sustainable, Climate-Neutral Cities

A perspective from WBCSD
16 November 2020
WBCSD – Business leadership for a sustainable future

200 global companies united around a common vision creating a world in which over 9 billion people are all living well and within planetary boundaries by 2050.
The Built Environment has a high carbon footprint

Every 5 days
a surface of the size of Paris is built

The building sector represents approx. 40% global energy-related GHG emissions

3.7 GtCO₂ building materials
2.8 GtCO₂ direct energy emissions
0.2 GtCO₂ indirect energy emissions

= 13 GtCO₂

Source: Global Status Report 2018, Global Alliance for Buildings and Construction

GOAL

ACHIEVE NET-ZERO EMISSIONS ACROSS THE BUILT ENVIRONMENT LIFECYCLE BY 2050.

Operation - Net Zero:
• 2030: all new buildings
• 2050: all buildings

Embodied carbon:
• 2030: at least -40% CO₂ emissions
• 2050: Net Zero
“System collaboration”
Roles and responsibilities of different actors in the value chain
Coherently address all emissions in the building system

Focalize attention on getting to “net zero” across the whole life-cycle

Enable performance-based regulation to allow for innovation across building stages

Highlight “carbon transaction” alongside cost transaction

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**Building System Carbon Framework**

Common metric and language by using a whole building life-cycle carbon approach

<table>
<thead>
<tr>
<th>BUILDING STAGES</th>
<th>PRODUCT</th>
<th>CONSTRUCTION</th>
<th>USE</th>
<th>END OF LIFE</th>
<th>EMISSIONS</th>
<th>BEYOND LIFE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1-A3</td>
<td>A4-A5</td>
<td>B1-B5</td>
<td>B6-B7</td>
<td>C</td>
<td>kgCO₂/m²</td>
</tr>
</tbody>
</table>

**BUILDING LAYERS**

- **Structure**
  - Foundation, load-bearing
- **Skin**
  - Windows, roof, insulations
- **Space Plan**
  - Interior finishes
- **Services**
  - Mechanical, electrical, plumbing
- **Stuff (optional)**
  - Furniture & appliances
- **Building carbon emissions**
- **Carbon compensation**
  - Removals and offset

**Common metric and language by using a whole building life-cycle carbon approach**

<table>
<thead>
<tr>
<th>Building level</th>
<th>Companies ambitions</th>
<th>System level</th>
</tr>
</thead>
<tbody>
<tr>
<td>kgCO₂-eq / m²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend**

- Embodied carbon
- Operational carbon
- Partial and total sums

[www.wbcsd.org/building-system-carbon-framework](http://www.wbcsd.org/building-system-carbon-framework)
Towards climate-neutral cities

- From business case to “value case”, starting with carbon/CO$_2$e – common language
- We need to overcome high transaction costs associated with the development of “good” projects
- This requires collaboration by all stakeholders within a city and beyond
- We need a new type of delivery organization to align interests and action between city, business and citizens
Julio Lumbreras

Mission Board for Climate Neutral and Smart Cities
Horizon Europe Missions

Climate Neutral and Smart Cities

#HorizonEU #EUmissions

Julio Lumbreras
Universidad Politécnica de Madrid
Julio.Lumbreras@upm.es

This presentation is based on the Commission Proposals for Horizon Europe and the draft legal texts on Horizon Europe agreed between the European Parliament and the Council in March/April 2019. It does not represent the official view of the European Commission.
MISSION AREAS:

- Climate-neutral and smart cities
- Healthy oceans, seas, coastal and inland waters
- Soil health and food
- Cancer
- Adaptation to climate change, including societal transformation

#HorizonEU
Be **bold and inspirational**, with wide societal relevance

Indicate a **clear direction**:
- targeted, measurable and time-bound

Spark **innovation across disciplines**, sectors and actors

Be based on a **bottom-up approach** of multiple solutions
● Systemic transformation
● A new model of city governance
STAKEHOLDERS at all levels:
private, public, R&I, civil society

INSTRUMENTS: financial, regulatory,
taxation, procurement, incentives
● Systemic transformation
● A new model of city governance
● A new role for the citizens
● Climate City Contract as the delivery mechanism
● A new role for innovation, experimentation, and learning
● Systemic transformation
● A new model of city governance
● A new role for the citizens
● Climate City Contract as the delivery mechanism
● A new role for innovation, experimentation, and learning
● A new form of funding and financing:
### Who should invest?

<table>
<thead>
<tr>
<th>PUBLIC INVESTMENTS</th>
<th>PRIVATE INVESTMENTS</th>
<th>CITIZENS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local/national/EU budget</td>
<td>COMPANIES: Sustainable funds</td>
<td>Investment in private assets</td>
</tr>
<tr>
<td>Grants (direct subsidies)</td>
<td>Private equity funds</td>
<td>Crowd-funding</td>
</tr>
<tr>
<td>Investment loans (subsidized)</td>
<td>Venture risk funding</td>
<td>Donations</td>
</tr>
<tr>
<td>Framework loans (subsidized)</td>
<td>Guarantees</td>
<td>Philanthropy</td>
</tr>
<tr>
<td>Equity funds (i.e. Sovereign)</td>
<td>Priv. companies investm. (CAPEX or Equity)</td>
<td></td>
</tr>
<tr>
<td>Public Procurement</td>
<td></td>
<td></td>
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<tr>
<td>Guarantees</td>
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</tr>
</tbody>
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### HYBRID

Private-Public Investment Vehicle

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Source: Lumbreras, 2020
A new model of city governance
A new role for the citizens
Climate City Contract as the delivery mechanism
A new role for innovation, experimentation, and learning
A new form of funding and financing:
  ○ One-stop-shop
  ○ Lending and blending facility
  ○ 10% EU MFF
  ○ Mission label
Concluding remarks
Concluding remarks

• Substantial financing gap – with investment needed and returns per type of stakeholders different (e.g. Sustainable investment in transportation, heating and electricity: cities have to invest 17% with a 6% return, whereas for citizens it’s a 31% investment for a 46% return) → how to bring everyone on board?
• Cities: procurement, permits and licensing → a lot of power
• Use a combination of financing tools and incentives and add all levels: local, regional, national, European.
• Revenue sharing model; blended financial solutions; asset recycling
• Measuring other benefits and value capturing (e.g. health, social): how to integrate this in the model? → importance of taking a life-cycle approach
• Accountability: to be decided in climate city contracts – but cities competitive, so do get involved!

Next:
Do contact us if you want to feed in your opinion on Viable Cities’ Finance – fedra.vanhuyse@sei.org

#SustainableCities #SmartCities
Thank you!