

***The European Union,
Cities, Funding & the Urban Agenda***

**Part 4: European Commission funding
...and EIB financing...for cities**

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***'Urban Policies in Support of 'Ireland 2040' seminar
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This presentation

- **The *Urban Agenda for the EU* and its 12 Partnerships**
- **Key EU policy areas and concepts for cities**
- **European support services and networks for engagement by (smaller) cities**
- **European Commission Funding
...and EIB Financing...for cities**
- **Comparative EU/OECD observations for Ireland**

Provided by three Regional Assemblies with DHPCLG support.

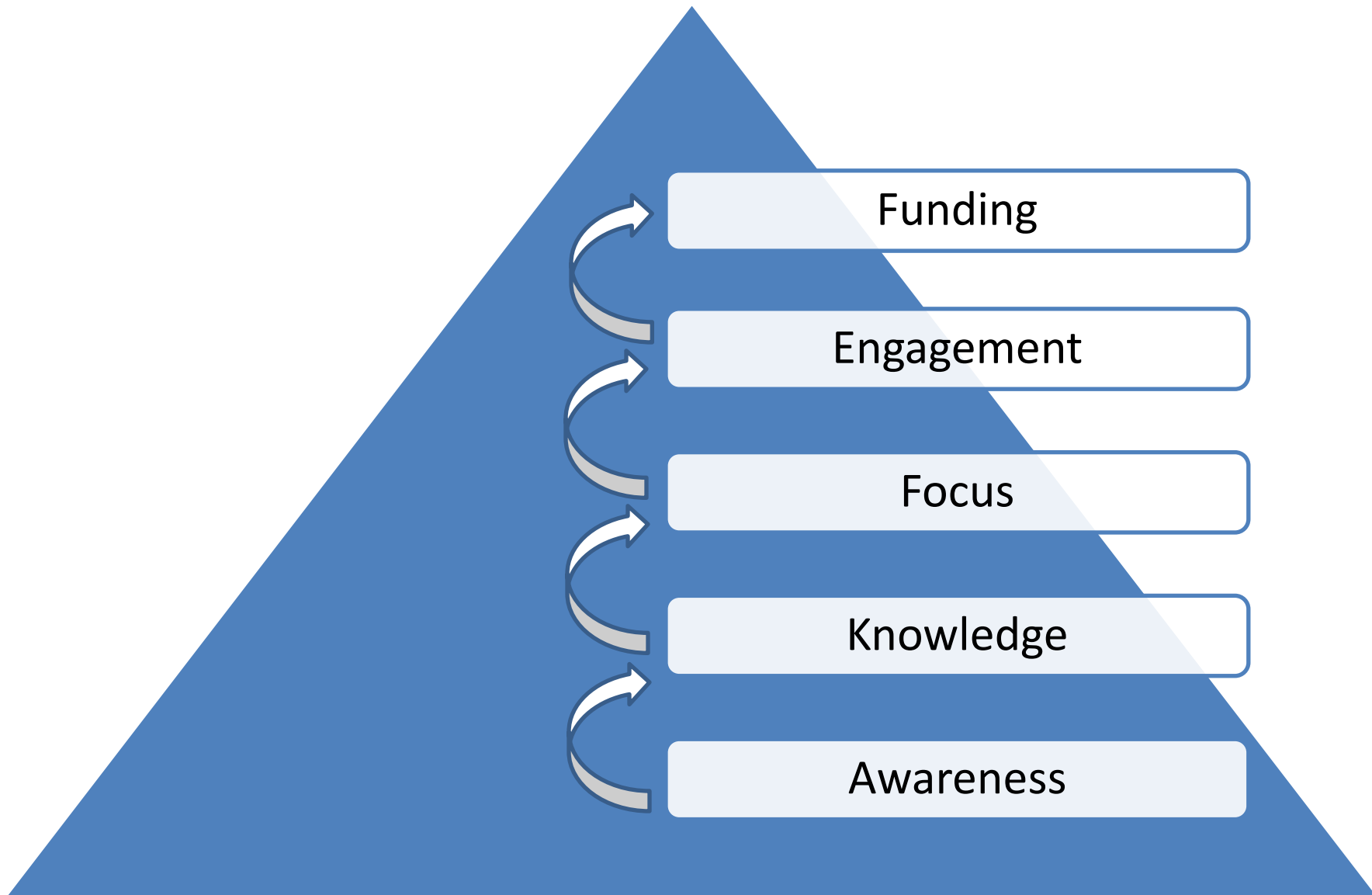
Specialised EU support service for all Local Authorities.

Wide-ranging monitoring, liaison and guidance to inform and facilitate domestic actors' individual and collective understanding of and engagement in European initiatives and activities:

- **Policy Information & Intelligence**
- **EU Funding**
- **Networking, Representation, Promotion & Lobbying**
- **Political Support (Committee of the Regions)**

Only Irish presence among 250+ regional/city representations to EU.
One of few Irish institutions present in Brussels.

Staff of 2.



Funding:

- Demonstrate ground-breaking solutions to major ('UAfE') challenges.
- Genuine experimentation ('urban labs'): investigate scientific approach to test new policy ideas. Major applied research focus.
- Funding + expertise.
- Minimum 50,000 (collective) population threshold.
- No transnational requirement.
- Status: **Second (annual) call open until 14 April 2017.**
 - sustainable urban mobility
 - the circular economy
 - integration of migrants and refugees.
- Budget: €371M. Approx €240M remaining for subsequent calls.
- 80% co-financing.

What is UIA

Urban Innovative Actions (UIA)
European Regional Development Fund
(ERDF - FEDER)



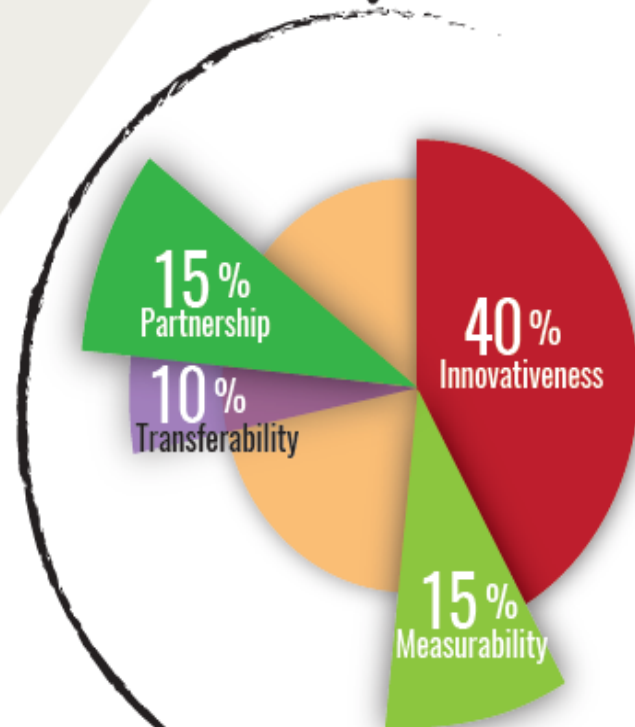
Main objective

To test innovative solutions to the main urban challenges and see how these respond to the complexity of real life

Specific requirements

- 💡 New solutions bringing EU added value
- 💡 Never been implemented anywhere else in Europe
- 💡 To be developed within three years
- 💡 Urban challenges that can be relevant to other urban authorities in Europe

Strategic Assessment



Urban Innovative Actions

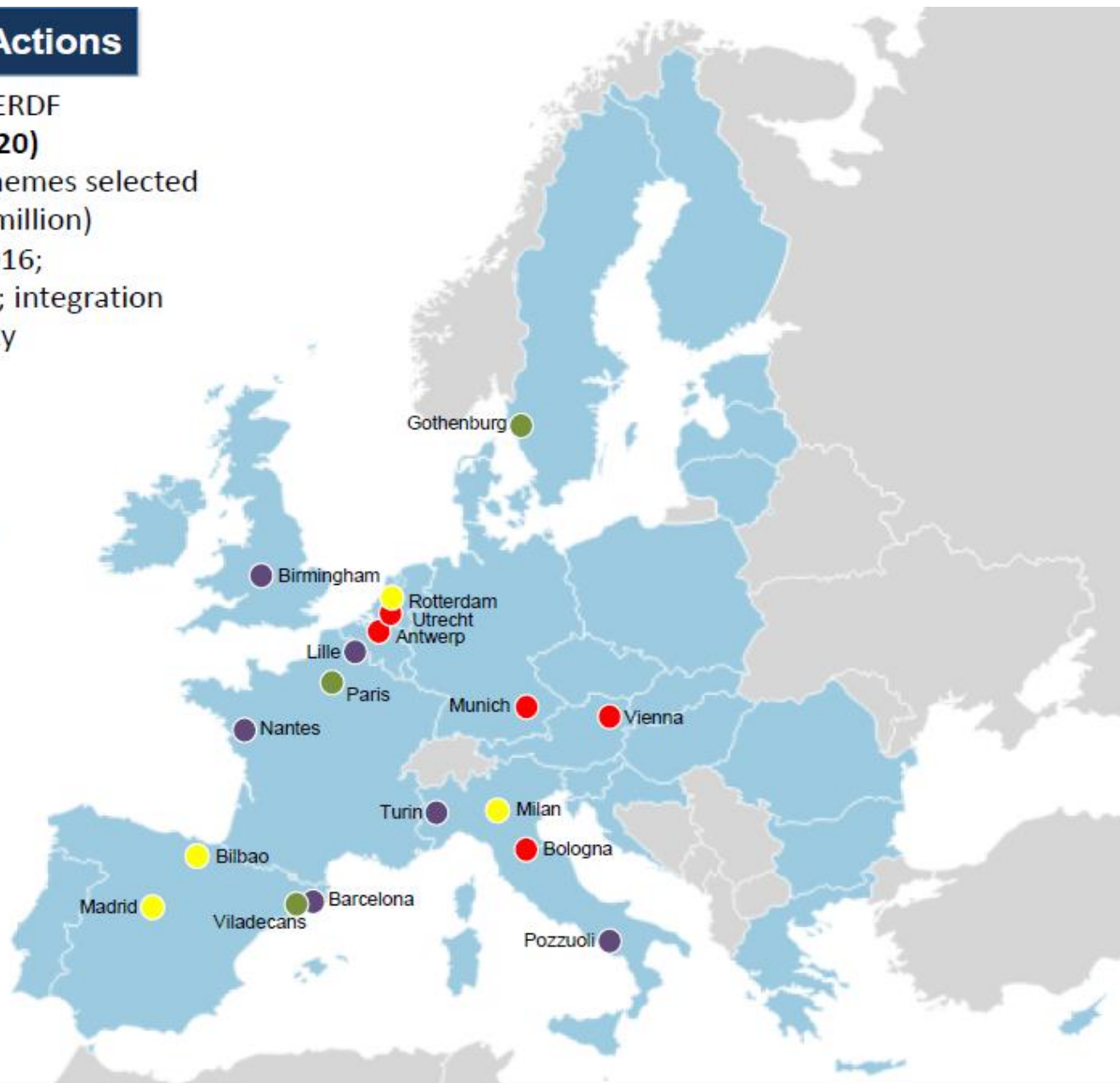
Initiative financed by the ERDF

EUR 371 million (2014-2020)

1st call: 18 cities on four themes selected
in October 2016 (EUR 80 million)

2nd call: end November 2016;
themes: circular economy; integration
of migrants; urban mobility

- Energy transition
- Migrants' integration
- Skills and jobs
- Urban poverty



UIA Project: *Vilawatt*

Local Public-Private-Citizen partnership for energy management.

Vilawatt Energy transition in Viladecans

- With an active role from the citizens, communities, companies and local administration.
- Energy management improvement and capitalization of the savings to boost the housing energy renovation.
- Promotion of the local economy, the education, the employment, the network neighborhood, the improvement of the city and the quality of citizens' life. (Integrated approach on the three sustainability dimensions: environmental, economic and social).

UIA “remaining” topics (2018-2021)

- ~~Urban poverty~~
- Affordable housing
- ~~Inclusion of migrants and refugees~~
- Air quality
- ~~Jobs and skills in the local economy~~
- ~~Circular economy~~
- Digital transition
- ~~Urban mobility~~
- Sustainable use of land and Nature-Based solutions
- Climate adaptation
- ~~Energy transition~~
- Innovative and responsible public procurement

(Topics may feature repeatedly)



Funding:

Framework Programme for Research and Innovation (€70.2 Bn)

Producing world-class science, removing barriers to innovation and bringing outstanding new research developments to market.

Innovation life-cycle (research-retail) – reduce support gaps.

Broad definition of (open) ‘Innovation’:

- not just technology/research in isolation.
- new uses for and combinations of existing technology.
- non-commercial applications
- new interaction with end users
- non-technological innovation
- business models

H2020...local opportunities?

Promising ideas need real world verification:

- Provide (Living Lab) setting for innovation activities: prototyping, test-beds, piloting, demonstration, market replication, scaling-up, procurement...
- Science » evidence » ready-to-use solutions.
- Interaction with citizens
- Sharing of results with policy-makers

Multi-disciplinary collaboration:

- Develop (local) “innovation ecosystems”...knowledge synergies, increased capacities, critical mass...?
- Partner with innovative enterprises to help to bridge gap to market uptake?

H2020...local opportunities?

- Fast-track deployment of new high-impact solutions.
- Innovation by/for public sector .
- Demand-side measures to stimulate public body uptake.
- Market risk-sharing via ‘Pre-Commercial Procurement’ (PCP).
- First application and wider roll-out of (partly?) technically proven ‘Public Procurement of Innovative’ (PPI) solutions
- Support for green procurement.
- Development of specifications for new standards to facilitate market entry or diffusion of innovations.

H2020 Strand 3 - Societal Challenges

€29.7 Bn (largest element)

Heavily influenced by *Europe 2020* Strategy.

Loose definitions of “challenges” – to encourage solutions.

Strong “sustainable development” element (esp. climate).

1. **Health**, demographic change and well-being (€7.5bn)
2. **Food** security, sustainable agriculture and forestry, marine, maritime and inland water research and the bio-economy (€3.9bn)
3. Secure, clean and efficient **energy** (€6bn)
4. Smart, green and integrated **transport** (€6.3bn)
5. Climate, **environment**, resource efficiency, raw materials (€3bn)
6. **Inclusive**, innovative and reflective societies (€1.3bn)
7. Secure societies, protecting freedom and **security** of Europe and its citizens (€1.7bn)

H2020: Food etc.

#2 Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research & the Bioeconomy.

2016-2017 calls included (non-agri) topic:

Rural Renaissance – Fostering Innovation & Business Opportunities, e.g.:

- Consolidated policy framework and governance models for synergies in rural-urban linkages
- Coastal-rural interactions: Enhancing synergies between land and sea-based activities
- Towards 2030 - policies and decision support tools for an integrated approach to the management of land as a resource
- Demonstration of integrated logistics centres for food and non-food applications
- Business models for modern rural economies
- Optimising interactive innovation project approaches and the delivery of EU policies to speed up innovation in rural areas

H2020: Energy

#3 Secure, Clean and Efficient Energy

- Reducing energy consumption and carbon footprint
- Low-cost, low-carbon electricity supply
- Alternative fuels and mobile energy sources
- A single, smart European electricity grid
- New knowledge and technologies
- Robust decision making and public engagement
- Market uptake of energy and ICT innovation

Horizon 2020 Energy Efficiency



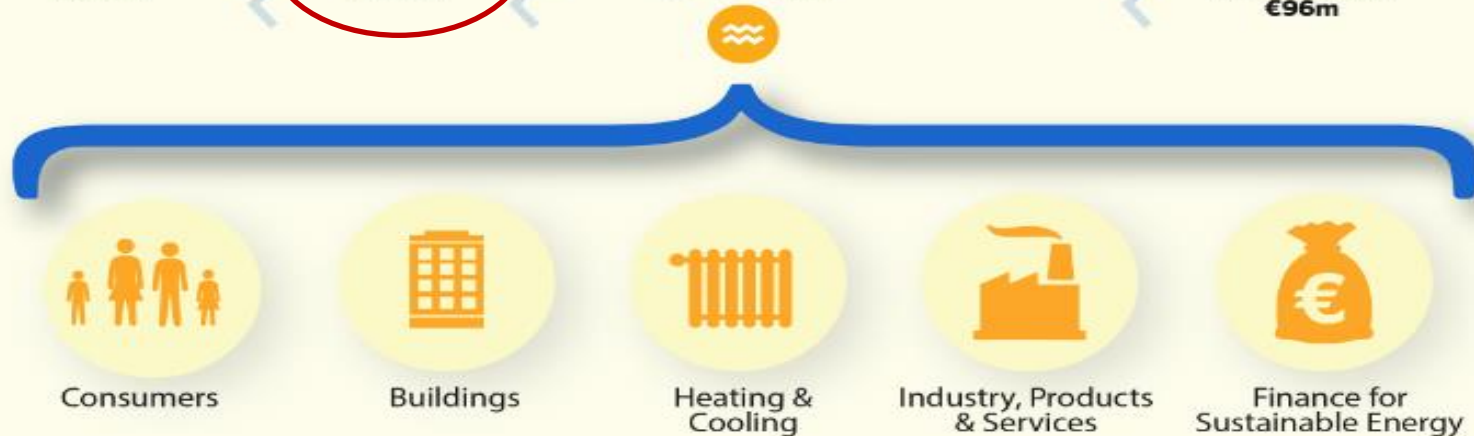
FUNDING PRIORITIES FOR 2016 & 2017

Competitive
Low-carbon Energy
€723m

Smart Cities &
Communities
€131m

Energy Efficiency Calls
€194m

SME Innovations for
a Low-carbon
Energy System
€96m



WHAT KIND OF PROJECTS ARE WE LOOKING FOR?

Research & innovation
actions that establish new
knowledge or develop more
energy-efficient technologies
and solutions.
EU funding rate: 100%.

Innovation
actions that demonstrate the
viability of new technologies and
solutions or support their first
deployment in the market.
EU funding rate: 70%
**except non-profit organisations: 100%*

Coordination & support
actions* that improve skills,
mobilise large-scale investments
or facilitate EU policy
implementation.
EU funding rate: 100%.

Also: ERA-NET Cofund & Public Procurement of Innovative Solutions (PPI)

H2020 SCC Lighthouse project:



[Cork City & County Councils, CIT Nimbus, UCC Tyndall]

Our vision

GrowSmarter: transforming cities for a smart, sustainable Europe

In a rapidly urbanising world cities need to become smarter to respond to citizen needs and to reduce their environmental footprint. GrowSmarter brings together cities and industry to integrate and demonstrate '12 smart city solutions' in energy, infrastructure and transport, to provide other cities with valuable insights on how they work in practice and opportunities for replication.

The idea is to create a ready market for these smart solutions to support growth and the transition to a smart, sustainable Europe.



12 smart solutions



3 Lighthouse Cities



Targets & evaluation



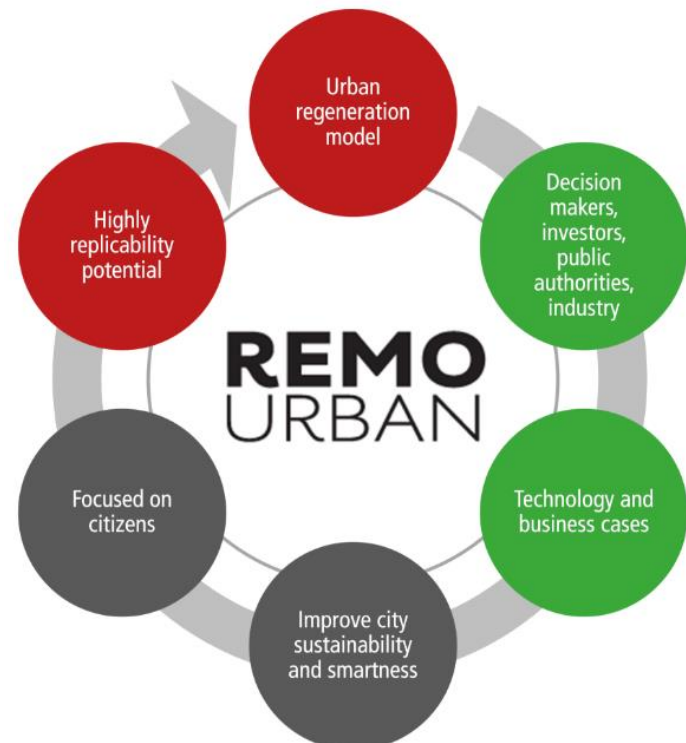
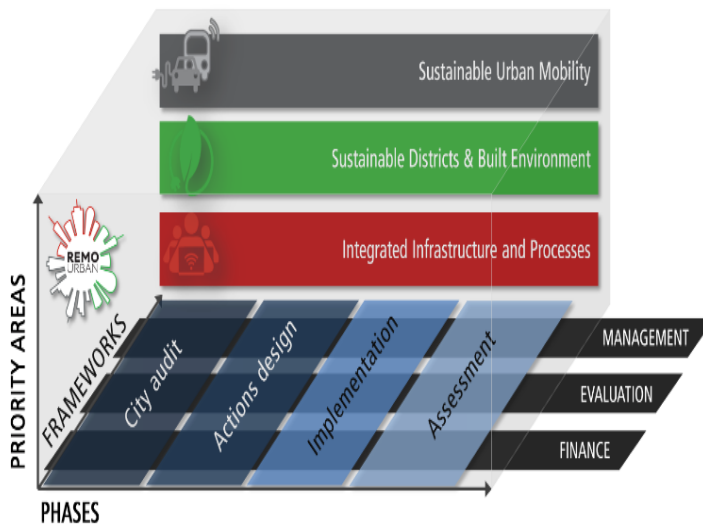
Knowledge replication



H2020 SCC Lighthouse project:



An urban regeneration model to develop a Smart City system for analysis, diagnosis and decision-making in the field of urban regeneration, including a decision-support tool to facilitate the selection of the most sustainable solutions, appropriate technologies and efficient business plans aimed at creating local value.



H2020 project:



[Dublin City Council + TCD (coordinator)]

- Sustainable and passive air remediation strategies, policy interventions and behavioural change initiatives to reduce carbon footprint of cities (emissions) and improve air quality.
- Deploy next-gen environmental living labs via networks of low-cost air quality and meteorological sensors (stationary and mobile).
- Evaluate expected benefits at neighbourhood and city scale.
- Encourage citizens to participate in use of alternative solutions to environmental problems (development and assessment of a framework aimed at changing mobility patterns).
- Sustainable urban planning and development impacts.

H2020: Transport

#4 Smart, Green & Integrated Transport...2016-2017 calls included...

Urban Mobility e.g.:

- Supporting 'smart electric mobility' in cities
- Public procurement of innovative urban mobility solutions
- Neighbourhood- and urban-district-level transport innovations

Intelligent Transport Systems e.g.:

'Mobility as a service'

Large-scale demonstration(s) of cooperative ITS

Socio-Economic & Behavioural Research eg:

- Big data in Transport
- Improving accessibility, inclusive mobility and equity
- Dynamics of individual preferences/lifestyles influencing travel

H2020: Climate & Environment

#5 Climate Action, Environment, Resource Efficiency and Raw Materials

- to achieve a resource – and water - efficient and climate change resilient economy and society;
- the protection and sustainable management of natural resources and ecosystems;
- a sustainable supply and use of raw materials to meet the needs of a growing global population within the sustainable limits of the planet's natural resources and eco-systems.

Project: **URBIS** [ICT-PSP programme]

Smart City solutions for integrated urban development impact assessment and visualisation.

Apply concept of urban “land recycling” (finite resource) to cope with further development without sprawl.

Overcome variable and fragmented data on re-development options and related policy trade-offs.

Identify, develop and validate operational potential of standard open-data provided for land recycling support.

Implement standard operational information services for urban vacant land recycling support with sustainable business model.

(ICT Policy Support Programme – CIP: www.ict-urbis.eu/)

Next deadlines...H2020

(7 June)

- Improving the performance of inefficient district heating networks
- Energy efficiency measures in industry and services
- Energy efficiency of industrial parks
- Public Procurement of Innovative Solutions for energy efficiency
- Innovative financing schemes

(7 September)

- Easier to install and more efficient geothermal systems for retrofitting buildings

(26 September)

- Resilience to extreme (natural and man-made) events

★ Funding(?): JPI URBAN EUROPE

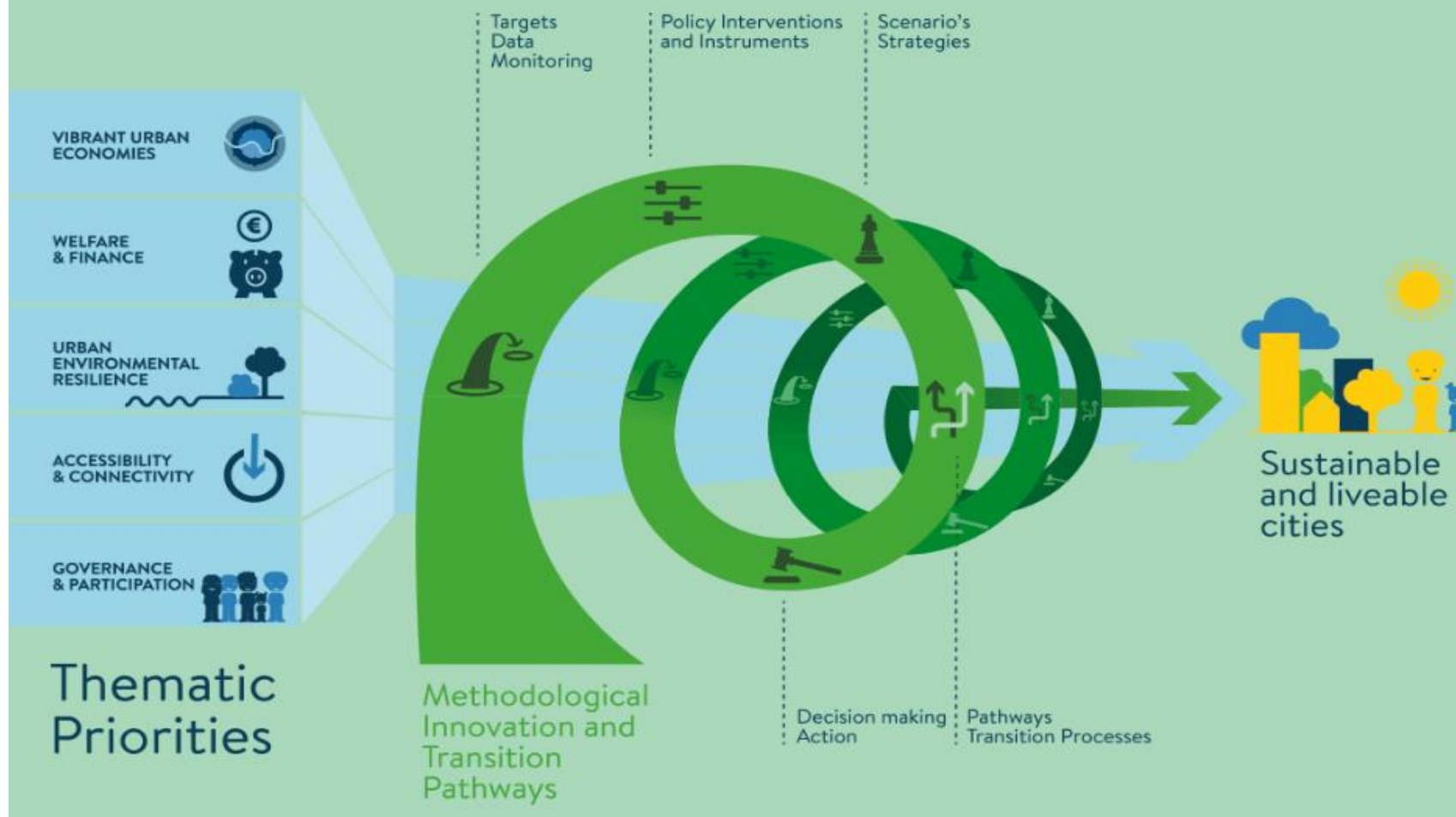
- Joint Programming Initiative (JPI): Intergovernmental (with EC support)
- *“Urban Europe - Global Urban Challenges, Joint European Solutions”*.
- Systemic questions: solutions integrating new tech achievements with new cutting-edge knowledge in social sciences, planning, and economy.
- **Transformative agenda: more sustainable, resilient and liveable cities.**
- “Smart”: integrated energy & transport tools & systems; utilisation of big data...governance.
- Overcome fragmentation (common vision & strategic research agenda... studies; national research exchange; alignment of national urban RDI programme issues; Research Alliance...)
- Transnational joint calls...research orgs & **urban stakeholders (platform)**
- Interested MS only (**not IE currently**)

www.jpi-urbaneurope.eu

Also, EUREKA Smart Cities (industry-led clusters): www.eureka-smart-cities.org/

JPI Urban

URBAN RESEARCH PRIORITIES FOR TRANSNATIONAL COOPERATION



JPI Urban project examples

1ST Pilot Call:

- Urban Diversity and Social Cohesion,
- Urban Systems and Networks,
- Governance of Complex Urban systems.

2ND Pilot Call:

- Governance of Urban Complexity,
- Urban Vulnerability, Adaptability and Resilience.

Project examples:

- CONCOORD: Consolidation and Coordination in urban areas
- APRILAB: Action-oriented planning, regulation & investment dilemmas
- CASUAL: Co-creating Attractive & Sustainable Urban Areas & Lifestyle
- URBANDATA2DECIDE: Integrated Data Visualisation & Decision-Making Solutions to Forecast and Manage Complex Urban Challenges

JPI Urban Europe ERA-NET co-fund projects

ENSCC ('Smart Cities & Communities'): projects on Smart Integrated Urban Energy and Transport Systems; Tools and Services for these systems; Big Data; and Governance & citizens, e.g.

- BREATHE - Urban form, location choice and transport solutions for low-carbon cities
- DESENT - Smart decision support system for urban energy and transportation
- SMART COMMUTING - Smart and Mobile Work in Growth Regions
- SMARTGOV - Advanced decision support for Smart Governance
- SURECITY - Sustainable and Resource Efficient Cities – holistic simulation and optimization for smart cities

ENSUF ('Smart Urban Futures'): projects for cities and civil society: RDI proposals, developing knowledge of the urban condition and sustainable development through creation and testing of new methods, tools, and technologies required to overcome current economic, social, and environmental challenges.

Funding:



- Improving implementation of EU environment, nature conservation and climate policy and legislation.
- Contribute to *Europe 2020*; 7EAP; EU Biodiversity Strategy.
- Mainly best practise, demonstration and pilot projects.
- Awareness, compliance, innovation, cost-effectiveness...

Helps find solutions to related challenges (all sectors of society):

- protection and improvement of quality of the environment;
- halting and reversing biodiversity loss;
- shift to resource-efficient, low-carbon & climate-resilient economy;

Also 'Integrated Projects' (large-scale territorial strategies).

Local/Regional Dimension - emphasis on better governance.

LIFE

- Budget: €2.79 billion budget for projects.
- 60% co-financing (75% for priority habitats/species).
- Annual calls (May-Sept).
- 2015 call...144 approved projects from 23 MS:
 0 approvals for Ireland (37 Italy; 38 Spain)
- National envelopes until 2017 only.
- Transnationality... increasingly emphasised.
- 10% assessment bonus for (2014-2017) **Work Programme** topics.
- Submit via Dept. of Communications, Climate Action & Energy.

LIFE (urban dimension)

- Includes challenges such as air quality, noise, energy, waste.
- Scope for land-use and planning and climate change mitigation?
- “Urban” LIFE projects (2015 call)...climate change adaptation, resilience and risk management (incl through planning)
...flooding/drainage...resource efficiency (road surfaces)...land-use...air quality... allotments... noise management (Low Emission Zone)
- Irish projects to date, not urban – ex. *WISER Life* (waste reuse, previous programme)
- Financial Instruments* (-2017):
 - Natural Capital Financing Facility (NCFF)
 - Private Finance for Energy Efficiency (PF4EE)

LIFE project:

- To improve the resilience of cities to climate change and to promote the use of green infrastructure as a way of managing surface water flooding.
- Develop and implement a pilot low-carbon sustainable urban drainage system (SUDS) with very low environmental impact, for the rehabilitation of urban areas.
- The system will use permeable pavements to reduce flooding caused by torrential rain runoff volumes, allowing water to be stored for use during periods of drought and protecting water quality.

LIFE project: LIFE URBANPROOF CLIMATE PROOFING URBAN MUNICIPALITIES

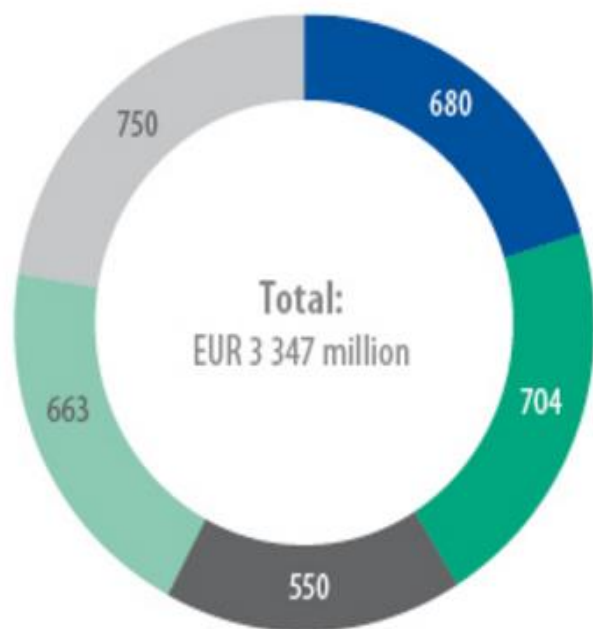
- Climate Proofing Urban Municipalities.
- Aims to pioneer the development of an innovative and interactive toolkit for urban municipalities, which will provide local decision-makers with visual information and guide them through the climate change adaptation process.
- Assess the likely impacts of climate change and develop local adaptation strategies, including the use of green infrastructure.

Ongoing LIFE+ project: **RURBAN**

R-Urban is a bottom-up strategy that explores the possibilities of enhancing the capacity of urban resilience by introducing a network of resident-run facilities to create complementarities between key fields of activity (economy, housing, urban agriculture, culture). R-Urban initiates locally closed ecological cycles that will support the emergence of alternative models of living, producing and consuming between the urban and the rural.

EIB lending to Ireland

2012-2016: EIB has provided €3.8 Bn for investment across Ireland to improve education, transport, energy and water infrastructure and access to finance by small business.



EIB lending by sector in Ireland
from 2011 to 2015 (in EUR m)

■ Energy	20%
■ Transport, telecommunications	21%
■ Water, sewerage, solid waste, urban development	17%
■ Education, health	20%
■ Small and medium-scale projects	22%

Also EFSI (primary health care centres, IW CAPEX...)

EIB Financial Instruments (FIs)

- Transforming grants into repayable forms of targeted investment.
- Loan guarantees & participation in equity (risk capital) funds:
 - to local banks on-lending to SMEs/start-ups
 - to boost investment in major infrastructure
- Can be recycled into reinvestment. Multiplied impact.
- Perceived greater financial discipline and project quality.
- ESIF (option) and certain direct funds (H2020, COSME, LIFE...)
- EIB-backed (AAA-rated) support to attract (co-)investment in “innovative” projects. Must be “bankable”.
- Address “real economy” market failures in line with policy priorities (+ socio-economic impact assessment). “Results-based”.
- Large direct loans (>€50m) or smaller on-lending via banks.
- Some support for local/regional funds

EIB FIs

- Supported by financial intermediaries (fund manager).
- Can help public sector to address certain market failures (including inhibiting development of towns and cities):
 - share/reduce investor "risk" of worthwhile development.
 - generate new market activity (increase confidence).
- Combined with grants (more integrated financing solutions):
 - address project viability issues;
 - efficiently support (investment-ready) pipeline development.
- Link: Underlying market failure – demand – proposed investment focus and strategy.
- Integrate FI into local delivery system.

EIB (urban)

- Specific Urban Agenda funding/knowledge roles...links to all 12 policy themes...involvement in some partnerships.
- Extensive track record. Main lending sectors (€95Bn 2011-2015):
 - water/sewerage
 - education
 - urban transport
 - housing & urban regeneration
- Mainly investment loans, framework loans and equity funds.
- Direct loans to 1 in 6 cities with population >75,000 ...Mainly (flexible) framework investment loans (3-5 years)
- Smaller towns: loans via intermediaries (“regional admins; public or private banks; specialised enterprises (e.g. housing, energy)”).
- Extensive financing (via banks) to public or private service providers (e.g. energy and health).



'Juncker' Investment Plan for Europe

- Removing obstacles to investment;
- Provide technical assistance* to investment projects;
- Smarter use of financial resources.

EFSI: €21Bn in **EC/EIB** (seed) finance to leverage €315Bn investment.

- A market-based risk guarantee arrangement...**not a "fund"**.
 - Projects to deliver growth and jobs (via other Juncker priorities)
 - Strategic infrastructure incl digital, transport & energy (RES, resource efficiency) education and R&I. Also SMEs.
 - "Lending to lower-rated municipal entities/companies"
 - Financing private service provision to LAs (PPPs; ESCOs;
 - EIB equity investment into Urban Dev Funds (regeneration)
 - No geographical/sector quotas. Open **EIB** lending assessment.

+ Advisory Hub (EIAH)* & Project Portal (EIPP) (showcase).

Set to be doubled and run to 2020.

Prospects for Irish cities? Impact on future Cohesion Policy?

EIB Case Study: Belgium programme loan

- Belgian *Smart Cities & Sustainable Development programme* (2015-)
- Intermediated €200 M loan (Belfius bank) (50% of total costs).
- Reach communities too small to access regular loans.
- 30+ projects...energy efficiency; sustainable mobility; regeneration:
 - riverside city centre traffic decongestion works (Dinant)
 - photovoltaic panels for school (Silly)
 - sports facilities (Genappe)
 - near-zero-energy public buildings (Schelle, Bierbeek and Gembloux)
 - rest homes (Sambreville, Landen, Stekene, Sint-Truiden)
 - a clean fuel filling station for waste-collection trucks (Harelbeke)
 - brownfield regeneration for new civic buildings with mixed-use urban development and sustainable mobility (Wetteren)
- 1 million inhabitants so far.
- ...Full pipeline ahead.



EIB case study: Bologna framework loan

€160 M “multi-sector framework loan”
(used for more than one project):

- renovation of several municipal buildings, roads, public spaces and squares;
- completion of a bike-path encircling the historic city centre;
- restoration of the part of the famed medieval roadside *porticos*.



“ All these different projects are
combined into one deal with the EIB at
a very good rate

EIB case study: Manchester UD Fund

- Tailored Urban Development Fund (UDF) based on integrated plan for sustainable urban development
- Investment vehicle for partial use of ERDF OP resources (EU + MS) via JESSICA sustainable urban development scheme.
- Access to additional EIB loans (to LAs).
- Managed by a financial institution (Evergreen) jointly established by 16 MAs.
- Provides (bankable) loans...attracts private co-investment ...reinvests payback proceeds.
- Planned four-fold fund recycle over (initial) 10 years.
- Citylabs: £24 M biomedical facility at former hospital;
- Cutacre: former mine site reconversion;
- Cotton Building: £10 M towards new building on an industrial site.



Sustainable Land Use and Nature-Based Solutions

Portaal Housing Corp., Netherlands, 2015

EUR 200 million to retrofit social housing and build new energy-efficient units in Amersfoort, Leiden and Nijmegen.

Ginkgo Funds, Belgium/France, 2010 and 2016

EUR 46 million of equity (some funded by the Investment Plan for Europe) for a fund using innovative techniques to decontaminate polluted brownfield sites, which it sells for construction of residential or commercial buildings.

Municipal infrastructure, land, 2012

Climate change is causing increasing droughts and floods in Polish regions. A EUR 1 billion loan is helping to modernise bridges in small cities in northern Poland like Lesna, which was flooded in 2013. It makes them more durable and allows them to cope with flash floods.



Housing

Jobs and Skills In the Local Economy



Rzeszow, Poland, 2015

EUR 145 million loan to fund a range of urban projects, including infrastructure services and transport connections to industrial enterprise zones employing local people.



Climate Adaptation

EIB ELENA – European Local ENergy Assistance

- Project development/technical assistance grants (<90%) for to the development of bankable large-scale sustainable energy investments (of scale >€30M) :
 - energy efficiency and distributed renewables;
 - urban transport schemes
- Feasibility and market studies, programme structuring, business plans, energy audits and financial structuring, preparation of tendering procedures, contractual arrangements...
- Smaller projects can be supported when they are integrated into larger/wider investment programmes.

Other EIB advisory services: UDF design/feasibility; ESIF FI scheme development; ESIF project development; EFSI technical assistance (Advisory Hub); EFSI showcase (Project Portal).

Irish LAs engagement with EU

- Post-BREXIT future – “at the heart of Europe”?
- Is Ireland – especially broad local government sector – sufficiently engaged in various initiatives?
- Entirely reactive...or contribute to shape direction (incl of €€€)?
- Width or depth (areas of focus)?
- Structures & resources: local, regional, system-wide?
- Formal tie-ins with policy (CoR)?
- Feeding into more urban-focussed policy-making?
- Responses to policy consultations?
- Monitoring developments “under radar”.
- Membership of European networks?
- Access to (and targeted use of) knowledge.

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 Cllr Michael Murphy responds to #Barrier raising Irish concerns on #brexit including Irish border & agri food #CoRplenary



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 Newer batch of Interreg Europe project partners incl @TipperaryCoCo @Dept_CCAE @West_BIC @CIT_ie @DonegalLEO @ERNACT & @SouthernAssembl (x2)

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 All second call projects are now online! Discover projects and their websites under four topics. interregueurope.eu/discover-proje...

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