



Altre iniziative di finanziamento sotto il Cluster 5: Clima Energia e Mobilità

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Horizon EUROPE

Horizon Europe - Quali opportunità per il Cluster Energia

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Tipologie di Azioni di finanziamento di R&D



- Bandi delle Missions: Sono azioni che non hanno un budget definito. Al momento sono allocati 5 mln di euro per la fase di kick-off. Azioni interdisciplinari volte a conseguire entro un periodo definito un obiettivo AUDACE e MISURABILE e che abbiano IMPATTO sulla società e sulla elaborazione delle politiche europee.
- Bandi nelle Partnerships: Possono essere finanziate dagli stati membri e dalla COM (co-funded), dalla COM e/o dalle aziende (co-programmed) o dalla COM e/o dalle aziende ma con una visione di lungo termine (Art. 185-187).
- Bandi nel Work Programme 2021-2027 (definito): insieme di call definite dagli stati membri su varie tematiche.



Partenariati

- Driving Urban Transition
- Clean Energy Transition
- Batteries
- 2zero
- CCAM
- Built4people
- Waterborne

cofunded

le call usciranno nel 2022

coprogrammed

le call sono nel WP 21-22

Missioni

- 100 climate neutral and smart cities
- Adaptation and climate change

Driving Urban Transitions to a Sustainable Future

Ambition:

- enable local authorities and municipalities, business and citizens to make global strategies into local action
- develop the skills, technologies, methods and tools to make urban change happen and boost the urgently needed urban transformations

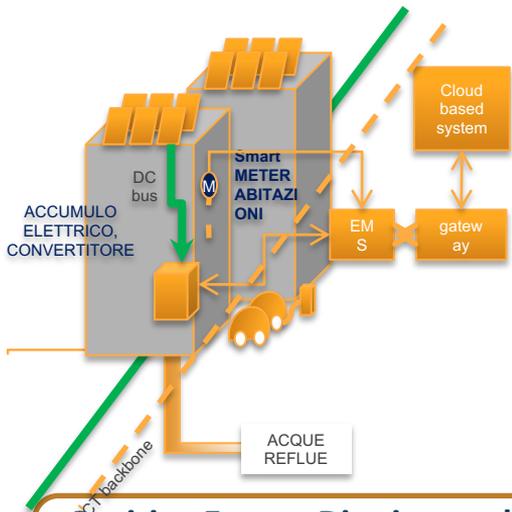
300 milioni euro contributo MS cumulativo + 30% COM
Per il primo WP l'Italia mette 2,7 M€

Target groups:

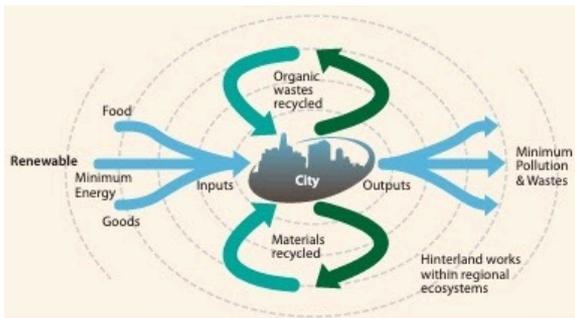
- city administration, across sectoral departments, and urban policy makers
- urban infrastructure and service providers
- business, industry, entrepreneurs
- local initiatives, civic society organisations, energy communities, etc.
- research and innovation organisations
- city networks and intermediaries

Basso TRL - Le prime call della DUT sono attese nel Q1 2022

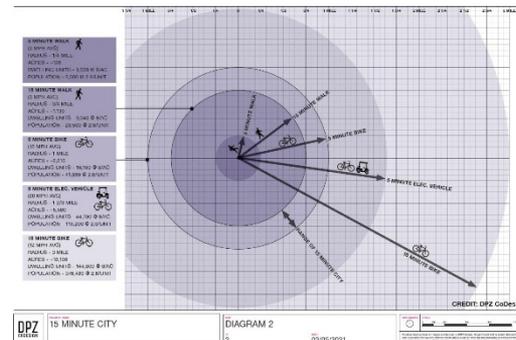
3 mission-oriented pathways



Positive Energy Districts and Neighbourhoods
transforming the urban energy system



Circular Urban Economies
an integrated approach for urban greening and **circularity** transitions



The 15 Minutes Cities
rethinking the urban mobility system and space

Think Tanks & Smart cities initiatives

- SET PLAN WG 3.2 Smart cities and communities: 100 Positive energy Blocks (1 PEB per MS at least) – 50% of them should be in cities with less than 100k inhabitants
- ERA-NET Smart Cities and Communities
- Progetti per le SC (H2020) 46 Lighthouse cities (In Italia: Firenze, Milano, Trento)-> problema della mancata replicazione
- Joint Programming Initiative URBAN EUROPE <https://jpi-urbaneurope.eu/>
- **New European Bauhaus Initiative** https://europa.eu/new-european-bauhaus/index_en

Le dimensioni della transizione urbana (Driving Urban Transition)

- Trasporti a emissioni zero e distretti urbani compatti
- Logistica

15' city

- Infrastrutture verdi e blu per la mitigazione dei cambiamenti climatici
- **Disintermediazione**
- **Economia circolare** e **tracciabilità**
- Uso di soluzioni 'nature-based' per la mitigazione degli effetti dei cambiamenti climatici

CURE

- **Autoconsumo ed autoconsumo collettivo**
- Mix energetico e diversificazione di vettori energetici
- Efficienza energetica nelle strutture

PED

Clean Energy Transition Partnership

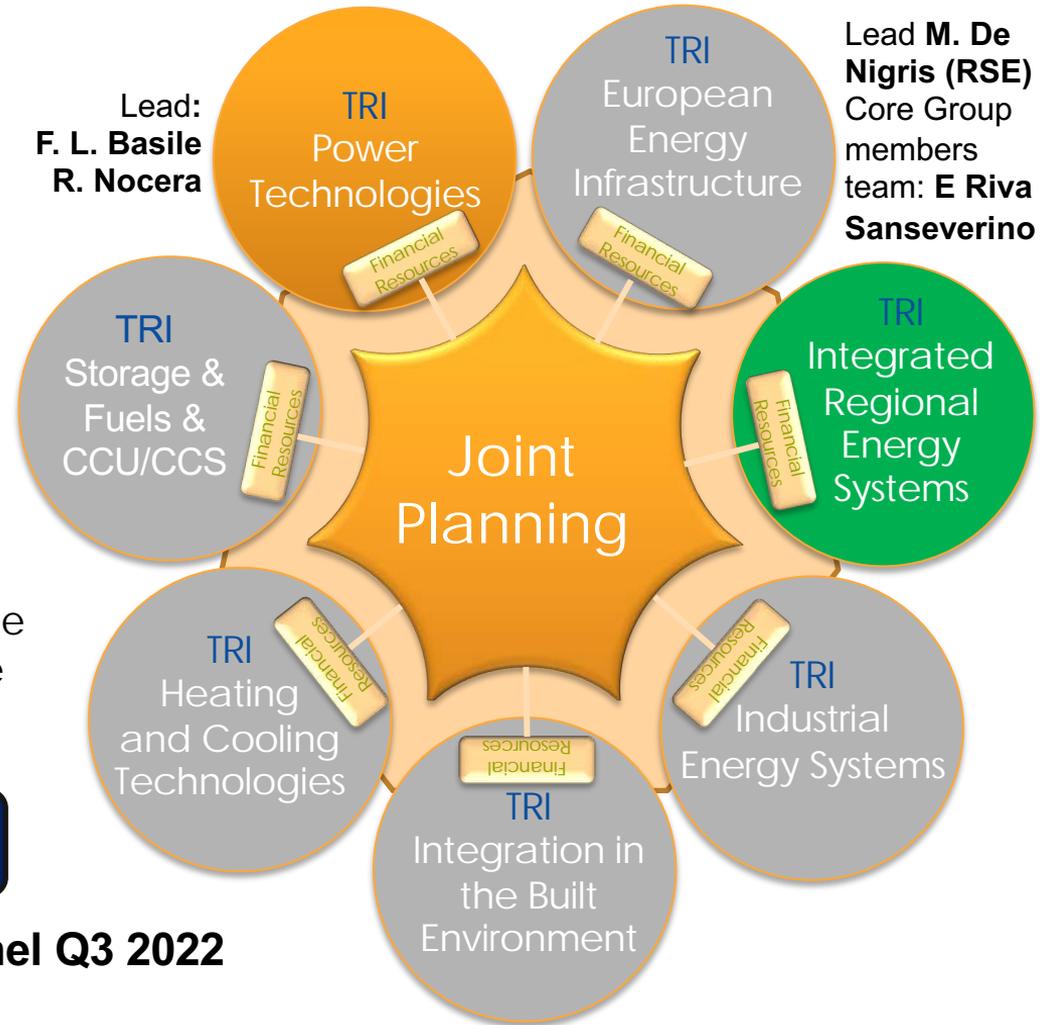
Think tanks:

- Eu Energy Research Alliance (EERA) JP
- Eu Technology and Innovation Platform (ETIP)
- Strategic Energy Technology Plan IWG

Per ciascuna Transition Initiative, è stato scritto l'Implementation Plan, che contiene gli obiettivi di breve, medio e lungo periodo.

650-700 milioni euro contributo MS cumulativo
Per il primo WP 8,2 M€

Le prime call della CETP sono attese nel Q3 2022

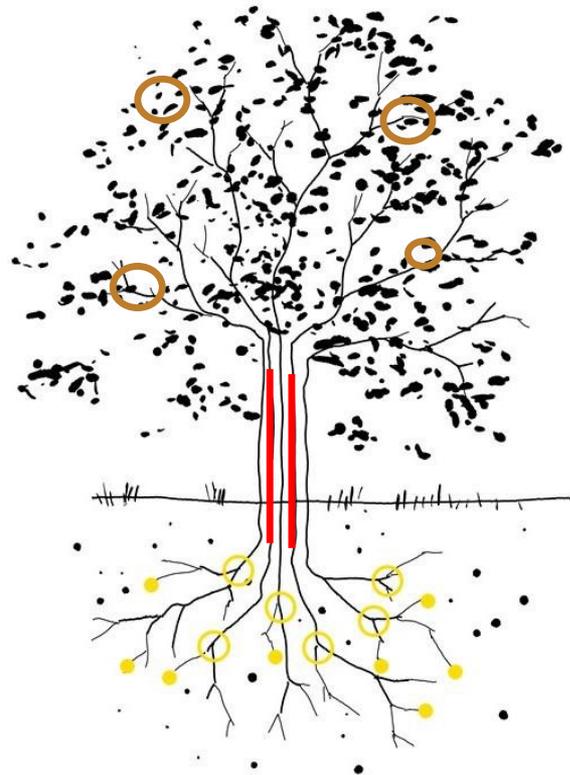


The new European Bauhaus

https://europa.eu/new-european-bauhaus/index_en

- Co-design (from oct.2020 to summer 2021)
- Delivery (sept. 2021 onwards)
- Dissemination (Jan 2023 onwards)

The New European Bauhaus initiative connects the European Green Deal to our living spaces. It calls on all Europeans to imagine and build together a sustainable and inclusive future that is beautiful for our eyes, minds, and souls.





MISSIONI

Adaptation to climate
change, including societal
transformation



Healthy
oceans,
seas,
coastal
and inland
waters



Mission
areas



Cancer

Climate-neutral
and smart cities



Soil health
and food

Budget for the missions from HE: 10% of
the Cluster 5 budget for the first 3 years



MEMBRI MISSION BOARD

Missione Area	Mission Board (IT nazionalità)
Climate	Jaroslav Mysiak (CMCC)
Cancer - CHAIR	Walter Ricciardi (Cattolica)
Ocean	Maria Cristina Pedicchio
Smart Cities	Anna Lisa Boni (Eurocities)
Soil	Catia Bastioli (Novamont)

Board Members

https://ec.europa.eu/info/sites/info/files/research_and_innovation/strategy_on_research_and_innovation/documents/ec_rtd_members-mission-boards_072019.pdf

Assembly Members

https://ec.europa.eu/info/sites/info/files/research_and_innovation/groups/ec_rtd_members-mission-assemblies.pdf

Missioni associate al cluster 5



100 Città climate-neutral entro il 2030 - con e per i cittadini

Accelerare la transizione verso un'Europa preparate e resiliente ai cambiamenti climatici entro il 2030

Trasformare il bisogno di prepararsi al cambiamento climatico in un'opportunità per vivere meglio. La Mission mira a velocizzare la trasformazione di una Europa che deve diventare capace di superare i rischi legati al cambiamento climatico.

1.Preparazione: entro il 2030, tutti gli Europei dovranno avere accesso ad informazioni chiare riguardo il rischio climatico, presente e futuro, nelle loro regioni.

2.Progettazione: entro il 2030, 200 comuni e regioni avranno sviluppato piani per ridurre il rischio climatico e per assicurare una migliore qualità della vita.

3.Dimostrazione: entro il 2030, vi saranno 100 "città pilota" le quali aumenteranno la resilienza di regioni e comuni

Le città, pur ricoprendo solo il 3% del suolo terrestre, sono responsabili di più del 70% delle emissioni.

La Mission mira ad avere, entro il 2030, 100 città climate-neutral in Europa.

1. La mission supporterà e promuoverà **100 città europee** nella loro trasformazione verso la climate neutrality e renderà queste città centri di sperimentazione ed innovazione e modello per le altre città
2. Ognuna delle **100 città pioniere** sottoscriverà un Climate City Contract, idoneo alla propria realtà, che si svilupperà attraverso un processo di co-design, cosicché tutte gli aspetti, che possono emergere ad ogni livello, verranno integrati.



Mission 100 Climate neutral and smart cities (100 città climate-neutral entro il 2030)

E' disponibile l'info kit per le città:

https://ec.europa.eu/info/sites/default/files/research_and_innovation/funding/documents/ec_rtd_eu-mission-climate-neutral-cities-infokit.pdf

E' una guida per preparare le città a candidarsi a diventare città climaticamente neutre.

Le città che partecipano alla Missione, dopo aver finalizzato il Climate City Contract, riceveranno una "Mission label" come riconoscimento della qualità e sostenibilità degli impegni presi.

A breve verrà aperta la possibilità di candidarsi per le città

<https://ec.europa.eu/eusurvey/runner/CNC-Pre-Registration>

Possibility for cities to pre-register

HORIZON-MISS-2021-NEB-01-01, CSA – single stage – closing date: 25.1.2022

OPEN CALL

Building blocks of climate neutrality in cities

- WHAT to do: Strategic dimension aligning goals and objectives in multi-level policy decision making.
- HOW to do: multi-level governance, multi-stakeholder approach, and bottom-up & participatory approach.
- WHAT SECTOR: climate neutrality plans cannot be tackled using sectoral policies alone. The cross-sectoral approach aims at overcoming the traditional, so-called 'silo-structure', whereby different sectoral departments do not work effectively together.
- WHERE: strategies must have appropriate territorial focus (one municipality, one Functional Urban Area..)
- WHAT RESOURCES: combination of multiple funding sources, and the associated increase in the significance of financial instruments, are two long-established trends in urban strategic planning, including climate neutrality plans
- MONITORING: effective monitoring quantifies the progress of a specific policy, strengthening transparency and legitimacy. Urban planning strategies often require multi-sector monitoring, while also measuring the added effect of having an integrated approach

WHAT EMISSIONS?

Mission Cities should account for emissions of the following gases (expressed as CO₂ equivalents): carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). If emissions from the IPPU sector are present, cities also have to cover emissions of hydro fluoro carbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).

Only Scope 3 emissions associated with waste disposal/management will be included under the definition of climate neutrality



	Direct emissions (Scope 1)	Indirect emissions (Scope 2)	Out-of-boundary emissions (Scope 3)
Buildings	Emissions from all buildings, facilities and permanent infrastructure / equipment (collectively referred to as 'stationary energy' and including public, private, residential and industrial sectors) within the city boundary (excluding EU ETS registered facilities) ³ .	Emissions from outside the city boundary due to the use of grid-supplied energy (electricity or district heating/cooling) within the city boundary	Not applicable
Transport	Emissions from on-road and rail (as a minimum) transport within the city boundary ¹ , disaggregated by municipal fleet, public transport, private and commercial transport.	Emissions from outside the city boundary due to the use of grid-supplied electricity used to charge electric vehicles	Recommended by 2030

Sorgenti di emissioni

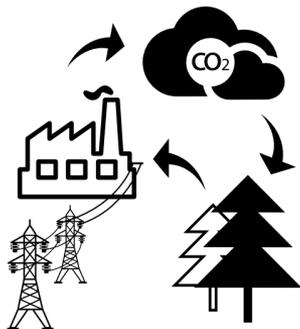
Table 4. The sources and sectors of GHG emissions which should be included in a city's GHG inventory for the purposes of the Mission.

		Direct emissions (Scope 1)	Indirect emissions (Scope 2)	Out-of-boundary emissions (Scope 3)
		ec_rtd_eu-mission-climate-neutral-cities-infokit.pdf		
Waste		Emissions from waste generated and managed/sent to landfill within the city boundary.	Not applicable	Emissions from waste generated within the city boundary but managed/sent to landfill outside the city boundary.
	IPPU	Emissions from GHGs used in, or as a by-product of industrial processes and products (if present / significant) ²	Not applicable	Not applicable
Chemical Processes In Industry				
Agriculture, Forestry And Other Land Use	AFOLU	Changes in GHG emissions from any changes in land use giving rise to (sources) or sequestering (sinks) emissions (if significant) ²	Not applicable	Not applicable

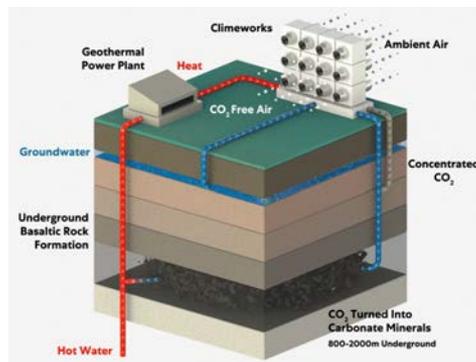
Residual Emissions < 20%

If cities have GHG emissions which cannot be fully mitigated by 2030 due to technological or financial constraints, those so-called residual emissions will have to be compensated.

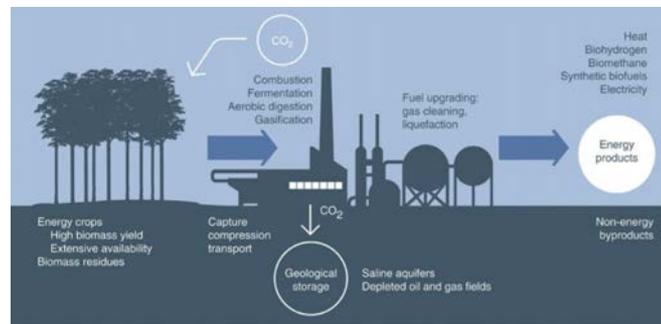
Natural sinks
(AFOLU)



Technological sinks



Direct air carbon capture (DACCS)



Biomass-energy carbon capture (BECCS)

Residual Emissions < 20%

If cities have GHG emissions which cannot be fully mitigated by 2030 due to technological or financial constraints, those so-called residual emissions will have to be compensated.

Carbon credits

Tradable certificate representing 1 tonne of CO₂ or CO₂e which can be traded where GHG emission surpluses and deficits exist. The use of Carbon Credits from outside the city's boundary to account for any residual emissions within the city boundary will be subject to certain rules and restrictions to be able to credibly demonstrate a city's climate neutrality (i.e., using formal credits/certificates verified and/or validated under rigorous standards by certified third-party auditors).

How to measure improvement

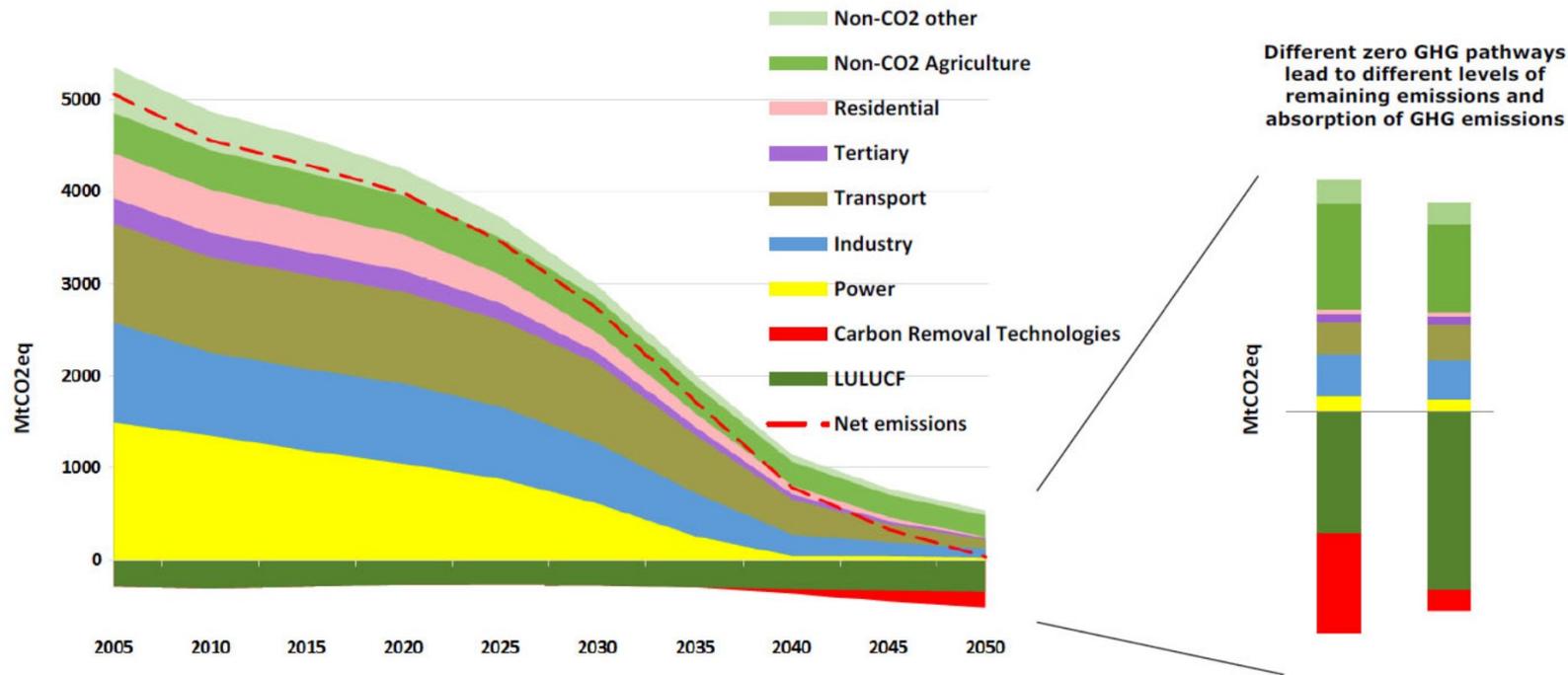
A climate neutrality target can, however, also be based on a base year emissions target (e.g., 90% GHG emissions reductions by 2030 compared to 2005 levels), as such explicitly acknowledging the level of residual emissions in the target year that will have to be offset.

In this case, it is important to establish the base year emissions in a comparable manner. Another option is a target expressed as a certain level of per capita emissions per year, accounting for population change (i.e., a so-called base year intensity target).

GHG inventory & roadmap

Figure 3. GHG emissions trajectory in a 1.5°C scenario.

Bars represent emissions in the two scenarios reaching net zero emissions in 2050.



Source: European Commission, 2108b.

Mission Adaptation

Accelerare la transizione verso
un'Europa preparata e resiliente al
cambiamento climatico entro il 2030

Trasformare il bisogno di prepararsi al cambiamento climatico in un'opportunità per vivere meglio.

La mission vuole sviluppare un'Europa climate-resilient: flessibile e capace di adattarsi alle sfide legate al cambiamento climatico.

1. Preparazione: entro il 2030, tutti gli Europei dovranno avere accesso ad informazioni chiare riguardo il rischio climatico, presente e futuro, nelle loro regioni.

2. Progettazione: entro il 2030, di 150 comunità e regioni avranno sviluppato piani per ridurre il rischio climatico e per assicurare la trasformazione verso una vita più sana e prospera.

3. Dimostrazione: entro il 2030, vi saranno almeno 75 "comunità/regioni pilota" che aumenteranno la resilienza di regioni e comuni



Italian Ref in ad hoc working Group

Antonio Navarra, Alessandro Amato



Grazie per l'attenzione

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