## The CLUDsLab

The CLUDs Lab was founded in 2011 thanks to the the CLUDs Research Project (Commercial Local Urban District), funded within the  $7^{th}$  European Research Framework Programme, Marie Curie IRSES 2010.

The Lab integrates Research and Training activities in the field of Sustainable Urban Development. We explore new approaches to the development and implementation of urban regeneration policies and economic development strategies, based on a Public-Private Partnership (PPPs) and urban-rural interaction.

The CLUDs Lab is part of the PAU Department at the "Mediterranea" University of Reggio Calabria (IT). The combination of higher education and research profiles is ensured by the existing international network established from 2011 to 2014 within the Research Project CLUDs and strengthened by the International Doctorate Programme in "Urban Regeneration and Economic Development" activated in 2012 at the PAU Department.

The Research network was confirmed for the Research Project MAPS-LED (Horizon 2020 - MSCA-RISE 2014), from to 2015 to 2019. The MAPS-LED Project provided useful hints on the territorial dimension of the EU Cohesion Policy through the spatialization of the US clusters and the investigation of the urban dimension of innovation in a place-based perspective.

In 2019, the CLUDsLab succeeded in obtaining two granted Horizon 2020 research projects: TREnD (Transition with Resilience for Evolutionary Development, MSCA-RISE 2018), and ZES (Opportunity innovation Zones for innovation EcosystemS governance, MSCA-IF-Global 2018).





#### People

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# From Horizon 2020 to Horizon Europe

### The European Horizon 2020 Programme<sup>1</sup>

Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over 7 years (2014 to 2020) – in addition to the private investment that this fund will attract. It promises more breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market.

### The Marie Skłodowska Curie Actions (MSCA)<sup>2</sup>

The Marie Skłodowska-Curie actions support researchers at all stages of their careers, regardless of age and nationality. Researchers working across all disciplines are eligible for funding. The MSCA also support cooperation between industry and academia and innovative training to enhance employability and career development.

### from :-- The MSCA Research and Innovation Staff Exchange<sup>3</sup>

TREND world. It help

Research and Innovation Staff Exchange (RISE) funds short-term exchanges of personnel between academic, industrial and commercial organisations throughout the world. It helps people develop their knowledge, skills and careers, while building links between organisations working in different sectors of the economy, including universities, research institutes and SMEs.

### to Horizon Europe<sup>4</sup>

Horizon Europe is the proposal for the new European Research and Innovation programme that will succeed Horizon 2020. The Programme rests on three main pillars:

The **Open Science** pillar supports researchers through fellowships and exchanges as well as funding to projects defined and driven by researchers themselves, through the European Research Council and the Marie-Skłodowska-Curie actions.

open Science

The **Global challenges** pillar directly supports research relating to societal challenges, setting EU-wide missions with ambitious goals around issues that worry us daily such as such as the fight against cancer, clean mobility and plastic-free oceans. Industrial leadership will be prominent within this pillar and throughout the programme as a whole

global challenges

The **Open Innovation** pillar aims to make Europe a front runner in market-creating innovation. A European Innovation Council will offer a one-stop shop for high potential and breakthrough technologies and innovative companies with potential for scaling up.

open innovation

<sup>1</sup> https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020

<sup>2</sup> https://ec.europa.eu/research/mariecurieactions/

<sup>3</sup> https://ec.europa.eu/research/mariecurieactions/actions/staff-exchange\_en

<sup>4</sup> https://ec.europa.eu/info/designing-next-research-and-innovation-framework-programme/what-shapes-next-framework-programme\_en

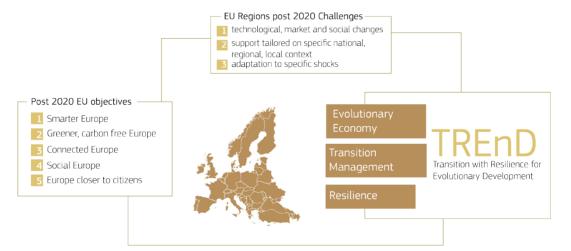
# The post-2020 EU Challenges

# What are the main challenges that EU regions will face for the post-2020 programming period?

"Structural change across the EU requires a different policy and institutional focus on 'ecosystems' of open, interconnected networks of stakeholders, cooperating through strategic partnerships able to respond rapidly and flexibly to technological, market and social changes";

"The support of environment for such ecosystems will unavoidably need to be tailored to specific national, regional or even local contexts. Policy packages need to be integrated and coordinated, delivered at a national, regional and local levels, while being adapted to the needs of different territories";

"The adaptation to the specific shocks on regional economies generated by globalisation and market integration require differentiated (or place-based) strategies."



The TREnD project highlights the need to diversify the regional economic portfolio, which is deemed to be crucial to EU regions. The most advanced regions tend to minimize their own extent of being "path dependent", preventing the hazardous risk to fall into "lock-in" phenomena.

At the same time, lagging regions seek to adopt the S3 approach to reduce the gap with the most advanced regions. Within this backdrop, where the spatial development unevenness throughout Europe has been widening, the TREnD theoretical framework envisions Transtion Management strategies as "coevolving processes which progressively build up toward a revolutionary change on the long term".

## TREND PROJECT



**TREND** Is a Marie Sklodowska-Curie RISE Research Project funded by the European Union's HORIZON 2020 Programme for Research and Innovation. The RISE Program aims to strengthen research partnerships concerning innovative issues by the **exchange of researchers among EU and Non-EU countries**.

The joint Exchange programme is based on a research proposal finalized at strengthening the regional capabilities in triggering, implementing and managing Transition Management (TM) strategies towards driving "resilience-building" processes. The main aim is to combine Transition with Resilience for Evolutionary Development (TREND) of different territorial contexts.

The Project is expected to produce a novel concept encompassing "resilience-building" processes and Transition Management strategies based on the Evolutionary Economy's assumptions. The TREND analysis will draft from the preceding MAPS-LED project, which pointed out the territorial dimension of the innovation.

As an outcome, three levels of spatial investigation are distinguished within the **EU-US broader contexts**: I) Internal areas, II) Leading regions, III) Regions in transition. Moreover, the diagnosis will assess the potential drivers of TM strategies including: I) territorial milieu, as successful factor assessed in preceding MAPS-LED and CLUDS projects; ii) resilience, conceived as the ability of systems – people, communities, ecosystems, nations – to generate new ways of operating new systemic relationships; iii) crisis, which hit local defined areas, conceived as opportunities, including: migration flows and economic crisis.

Relying on the strong existing CLUDs research network and its International Doctorate URED, the TREND project is expected to add value to the current knowledge about regional economic diversification. By moving forward the MAPS-LED project's outcomes concerning the Entrepreneurial Discovery Process (EDP) and the Knowledge Based Urban Regeneration (KBUR), the TREND will provide the **Open Access Toolkit**: a web platform accessible by community users, policy makers, investors and financial stakeholders.

The Open Access Toolkit will provide a set of indicators regarding: 1) context, 2) result, and 3) performance as metrics of resilience-building process within TM strategies.

# THE TREND PROJECT NETWORK



### Università degli Studi Mediterranea di Reggio Calabria

Department of Heritage, Architecture and Urban Planning (PAU) Reggio Calabria, IT UNIRC



#### Università degli Studi di Palermo

Department of Economics, Business and Statistics Palermo, IT UNIPA



#### Universiteit Utrecht

Department of Economic Geography Utrecht, NL



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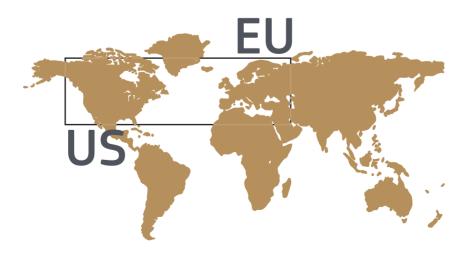
#### Northeastern University

Department of Economics Boston, MA, USA NEU



#### Louisiana Tech University

Ruston, LA, USA



# Innovative Aspects

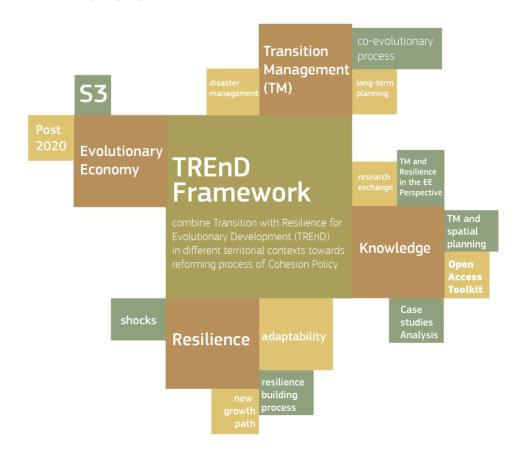
The relevance of the research project lies in bridging together: (i) Resilience as an on-going process of change rather than a recovery to a (pre-existing or new) stable equilibrium state, with (ii) Diversification as a leverage of regional resilience to absorb shocks, and (iii) Evolutionary Theory based on "continuing and progressive change".

In this perspective, the innovative aspect stems from conceiving Transition Management (TM) as a keen strategical approach to translate the combination of Resilience, Diversification, and Evolutionary Theory into policy design and implementation.

Hitherto few EU-funded projects have addressed TM in an environmental sustainability perspective. TREnD is a ground-breaking proposal envisioning TM in the fore-mentioned framework, addressing regional economic diversification.

The expected result of the research project lies in providing a platform in the shape of an Open Access Toolkit (OpenAT) on the basis of capturing resilience and evolutionary path as policy designing factors.

#### TREnD Framework



### TOPICS

The research project will be developed during the first phase by considering the pulled-out results of Research and Innovation Strategies for Smart Specialisation (RIS3) regional plans whose lifespan will end by 2020 and the findings of cluster analysis carried out from the MAPS-LED project in US context (Boston Metropolitan Statistical Area). Upon an evolutionary perspective, the analysis will be based on retrospective longitudinal studies addressing ongoing trends and, in a broader time framework, past or current transitions trends. The characterization of regions will be defined with a set of indicators (socio-economical) concerning the past development trajectories (e.g. Path-dependency) and the local degree to shift into a related/unrelated diversification.

The TREnD project will be conducted over two stages: both generating inputs for the definition of integrated actions and for building, incrementally over project lifetime, the structure of TM metrics connected to the Resilience building process to be implemented through the Open Access Toolkit (OpenAT). The OpenAT is conceived as a useful pilot guide for post 2020 cohesion policy. The experimental phase (second stage) of the OpenAt will involve three lagging regions and one leading region in Europe.

The general framework of the research programme will be organised across four main topics:

- Evolutionary Economics recognizing that the dynamic process due to innovation and research defines different equilibrium path that can be better explained by the territorial response. Past development trajectories (e.g. RIS3 for European case studies and US cluster); Relatedness; Variety; Local tacit Knowledge; Embeddedness in Territorial Knowledge dynamics;
- Resilience Factors related to the governance systems in terms of adaptive process Local and national policies; Institutional capacities; Rate of entrepreneurship; New firm formation in the region; Access to credit.
- **Transition Management** Strategic and tactic approach to response to shocks and crisis Time, Frame and scope of Transition; Screening of the policies and legislations in the relevant policy field/s; Networks; Composition of Transition Arenas; Windows of local opportunity disclosed in the aftermath of shocks;
- **Spatial Planning** the features that each context can express in different wayAvailability and Accessibility to Public urban areas; Availability and Accessibility to vacant spaces; Urban/regional link

## RESEARCH ACTIVITIES

The research activities according with the four mentioned topics are structured into 4 phases. The phases have the objective to correlate the theoretical approach stemming from the evolutionary economy topic with the necessity to give a practical explanation of resilience and transition in terms of indicators and metrics.

The Project is articulated in four Work Packages

### WP1

# Transition Management and Resilience in the Evolutionary Economy Perspective

The first phase, indeed, will lead to unfold critical factors, drivers and hindrances, which define Transitions and "Resilience-building" processes. Upon an evolutionary perspective, the analysis will be based on a set of indicators (socio-economical) concerning the past development trajectories (e.g. Path-dependency) and the local degree to shift into a related/unrelated diversification.

### WP2

### Transition Management and Spatial Planning: towards a new territorial dimension of the Cohesion Policy

The second phase will unveil the impacts of the territorial aspects in regard of "resilience-building processes" towards new patterns of territorial development. It will be rewarded much emphasis on governance aspects including: local networks, transition arenas, and role of external actors through US-EU case studies comparison. Spatial analysis built on GIS mapping database, will be conducted to gauge the effect of the "space/place" on related/unrelated diversification indicators.

### WP3

# Responses to external shocks: case study analysis through a resilience perspective

The third phase will sketch out how external shocks can provide latent opportunities to re-orient local development trajectories. The case studies will be assessed according to the "backcasting" approach in order to fully exploit the window of local opportunity disclosed in the aftermath of shocks and to design TM.

### WP4

#### Open access Toolkit: a new gateway for regional transition policies

The fourth phase will be incrementally developed over project lifetime to upgrade metrics of TM and Resilience building process to be implemented through the Open Access Toolkit

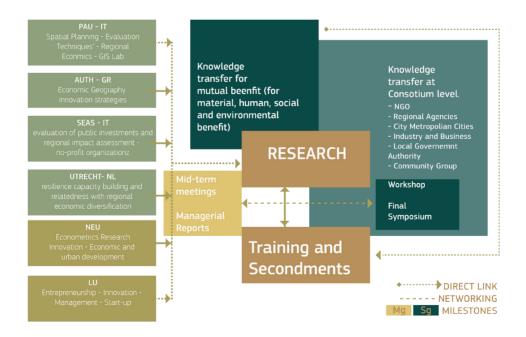
# Knowledge-sharing Approach

The approach that will be followed in order to set up the knowledge sharing methodology aims at achieving the best result in terms of:

- 1. Strengthening the international network of Academic Partners collaboration;
- 2. Enhancing career opportunities of active research staff;
- 3. Maximizing the research impact in terms of the influence on policy-makers and the wider resilience and transition management community.

The multi-disciplinary approach of the TREnD Project requires a synergetic methodological framework between the partners to pursue aligned knowledge transfer and crossfertilization through planned secondments, workshops, mid-term meetings and research-related activities

Such approach, at the heart of MSCA-RISE program, fosters the skill development of the involved research staff (ERs and ESRs) to the highest quality of know-how to get transferred on person-to-person level, organizational level and at the system level. The following figure shows an appropriate approach and the methodology involving managerial and scientific milestones that will be used for knowledge sharing and transfer based on partners competences, experience and complementarity in the research project fields.

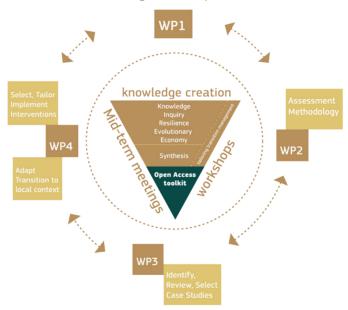


# EXPECTED RESULTS: THE OPEN ACCESS TOOLKIT

The main goal of the research in terms of expected impact concerns the construction of the OpenAT for the European Post-2020 Cohesion Policy.

The OpenAT is expected to enhance the regional administrative capabilities in triggering, implementing and managing Transition strategies towards resilient-building processes. In a broader view, it will work as a "capacity building" tool to promote the diffusion of social innovation. Nonetheless, a more reactive and responsive public administration is largely needed in a knowledge-based society to reach higher impact R&I outputs, leverage more on knowledge and ideas converting them into products and services.

#### Knowledge to action process



**Action Secondments** 

The TREnD web-based Platform will be designed and constructed during the first work package of the project, in order to bring all the partners together while allowing a constant interaction through the dissemination of online documents, research ideas, and working papers drafts. In the long-term, the platform will serve to develop the OpenAT aimed at the visualization of the different indicators resulting from the case study analysis.

The OpenAT will provide a tailored policy-making platform on the basis of capturing resilience and evolutionary path as policy designing factors. The OpenAT will provide a set of indicators regarding: 1) the context 2) the results, and 3) performance to better support the implementation of TM strategies in different regional and local contexts.