



# 9<sup>th</sup> CONFERENCE

on the Evaluation  
of EU Cohesion Policy

## Shaping Transitions with Evidence

16-17 September 2021  
Porto, Portugal

### Session 4:

**How can evidence-based policy keep up with the  
fast-changing world?**

Thursday 16 September 2021  
14:30 – 15:45 GMT+1

**#CohesionEval2021**

Regional and  
Urban Policy

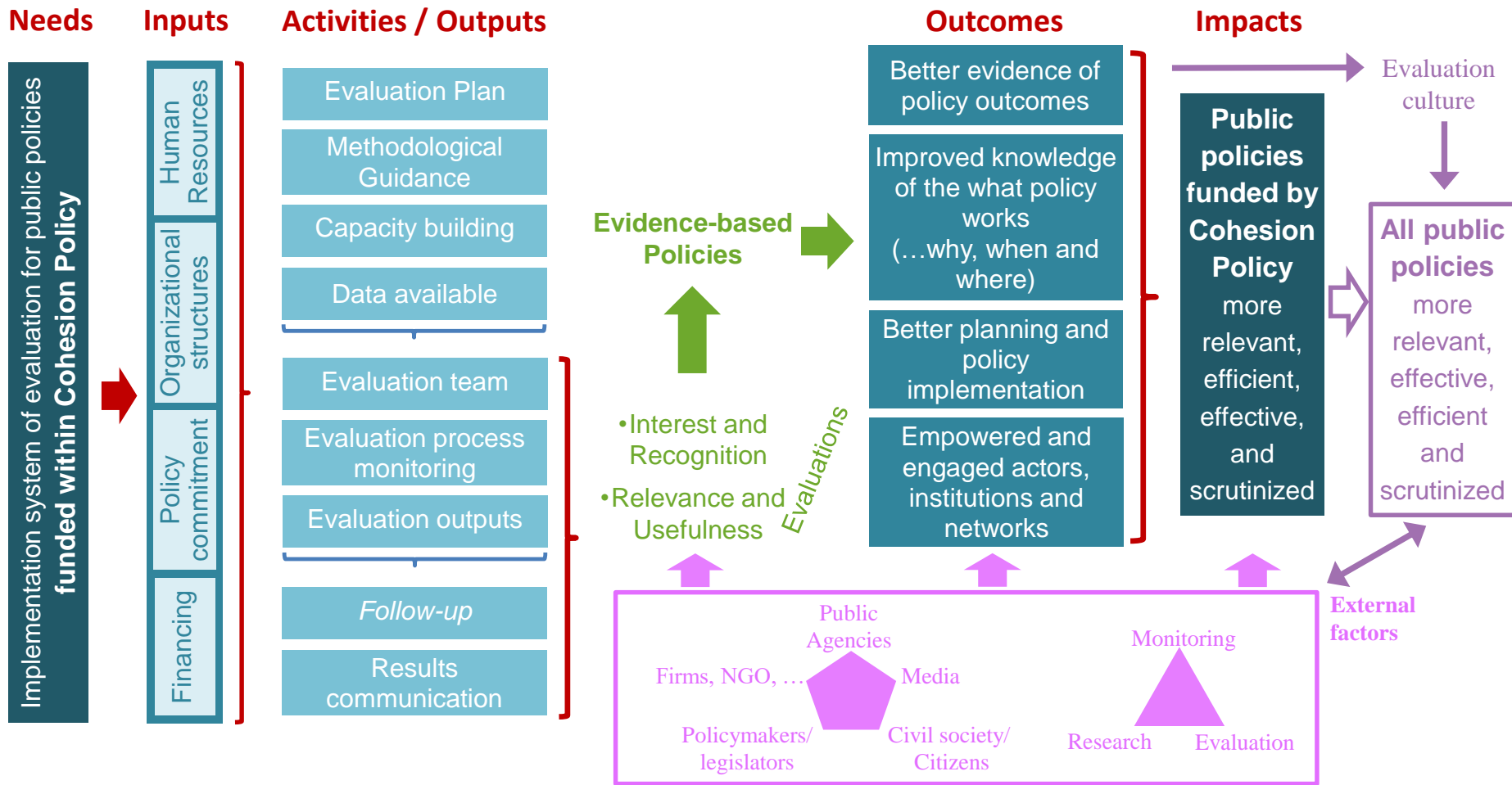
**Moderator: Jennifer Baker**

**Chair: Peter Berkowitz**, Policy Director, Directorate-General for Regional and Urban Policy, European Commission

**Speakers:**

- **Duarte Rodrigues**, Vice-President, Agency for Development and Cohesion, Portugal
  - **Riccardo Crescenzi**, Professor of Economic Geography, London School of Economics
  - **Julia Bachtrögler-Unger**, Economist, Austrian Institute of Economic Research
  - **Katerina Mantouvalou**, Director, Europe Policy, ICF
  - **Jos Vaessen**, Adviser, Independent Evaluation Group, World Bank
  - **Dominika Rogalińska**, Director of the Department of Spatial and Environmental Research, Central Statistical Office, Poland
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# THEORY OF CHANGE OF THE PORTUGAL 2020 EVALUATION



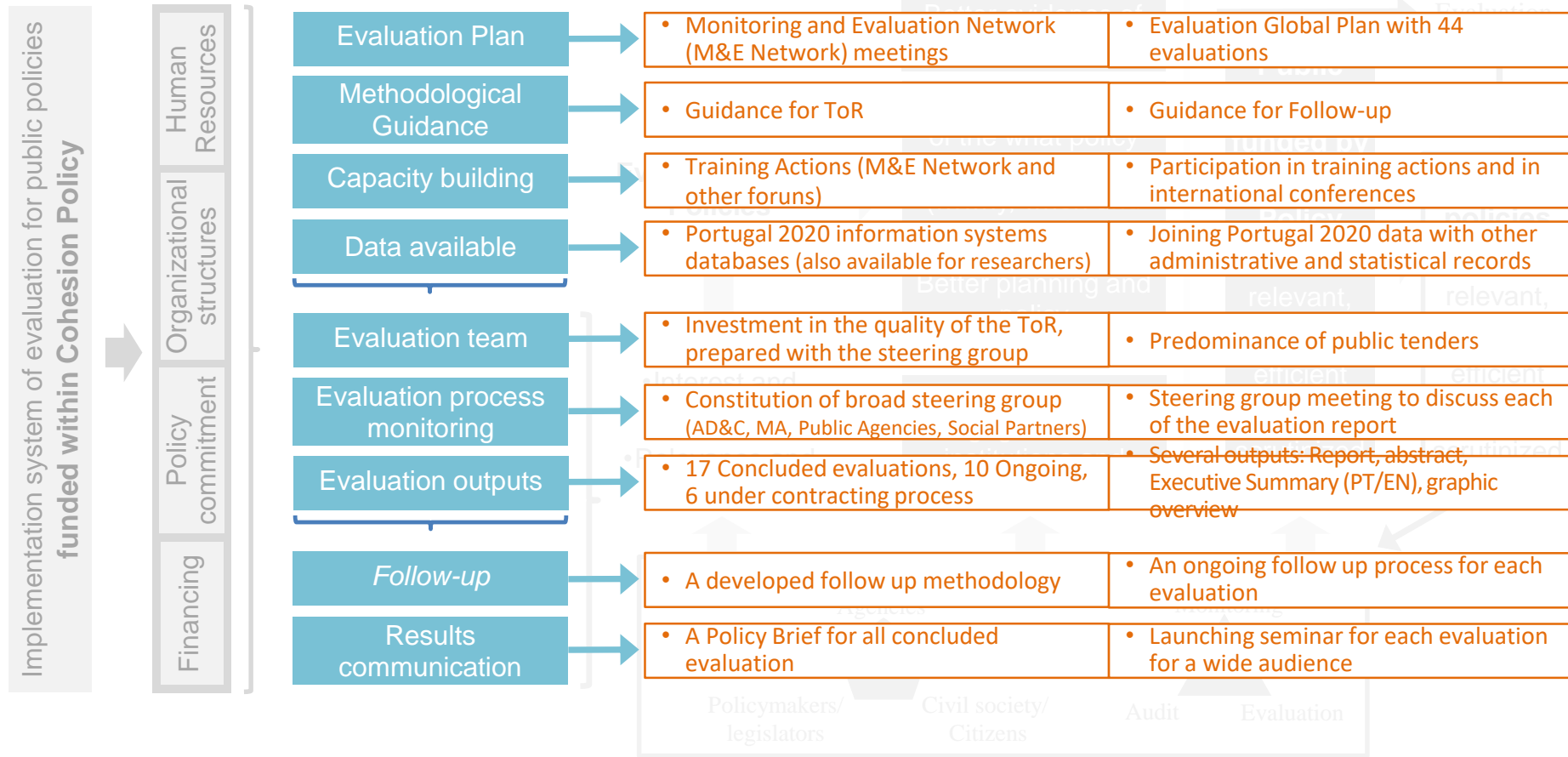
# THEORY OF CHANGE OF THE PORTUGAL 2020 EVALUATION

Needs

Inputs

Activities / Outputs

MAIN ACHIEVEMENTS



# THEORY OF CHANGE OF THE PORTUGAL 2020 EVALUATION

## MAIN CHALLENGES FOR GEAR UP EVALUATION FOR THE NEXT PROGRAMMING PERIOD

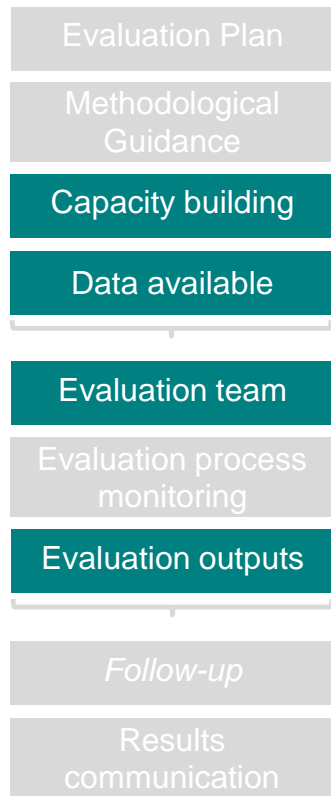
### TIMELINESS

Needs

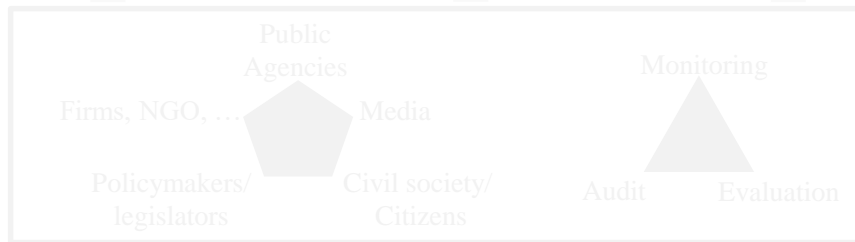
Inputs

Activities / Outputs

Implementation system of evaluation for public policies funded within Cohesion Policy



- More **robust evaluations teams** in Cohesion Policy entities – *Role of Roadmap for capacity building on Cohesion Policy Ecosystem*
- Improve engagement from the **academia** in evaluation of public policies – *recent call on TA OP for methodological improvements*
- Enlarge process of **cross data with administrative and statistical records** – *Cooperation with Statistical system*
- More use of **open data** – *webPortal + [transparencia](#)*
- Improve **result orientation of management information system**
- **Capacity building of evaluators**
- Better contract framing on **deadlines**
- Better balance between evaluations on **process (sooner)** and on **impact (later)**



External factors

# THEORY OF CHANGE OF THE PORTUGAL 2020 EVALUATION

Needs

Implementation system of evaluation for public policies  
funded within Cohesion Policy

Inputs

Human Resources  
Organizational structures  
Policy commitment  
Financing

Activities / Outputs

Evaluation Plan  
Methodological Guidance  
Capacity building  
Data available  
Evaluation team  
Evaluation process monitoring  
Evaluation outputs  
Follow-up  
Results communication

## MAIN CHALLENGES FOR GEAR UP EVALUATION FOR THE NEXT PROGRAMMING PERIOD

# BROADER USE

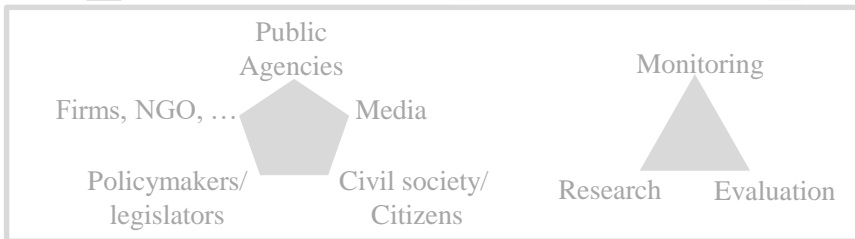
Evidence-based Policies



- Interest and Recognition
- Relevance and Usefulness



- **Capacity building** of all stakeholders – *Role of Roadmap for capacity building on Cohesion Policy Ecosystem*
- Improve complementarities among **monitoring/evaluation/research**
- Broad use of evaluations at the level of each **major projects or each policy programme**, including territorial instruments
- Improve follow up responsiveness from agencies
- Continuous improvement of **language and communication** of evaluation process and results
- Strengthening evaluation process **outside Cohesion Policy** instruments – *Role of PlanAPP (new PT competence center for planning)*
- ...also at **EU level**



External factors

9<sup>th</sup> Conference on the Evaluation of Cohesion Policy  
Shaping Transition with Evidence  
16<sup>th</sup> September 2021

# How can evidence-based policy keep up with the fast-changing world?

# The 'new' world

Marked **heterogeneity of Covid-19 impacts across sectors, GVC segments and regions** within countries

New **geo-political fragmentation, stagnating FDI flows, re-organisation of GVCs**

New forms of **innovation driving response to Covid-19 and recovery** (e.g. Work-from-Home and digital transition; net zero targets etc. )

**Unprecedented shift in public policy paradigm** and resources mobilised for recovery

New patterns of **social and territorial inequalities**



# How to keep up?

Learn from Cohesion Policy for **inclusive** territorial impacts

- Look at what works (and where) in Cohesion Policy to make impacts more inclusive

Learn from Cohesion Policy for **timely** Recovery by informing and shaping **other EU policies**

- Learn from Cohesion Policy as a laboratory for other policies (e.g. Recovery Fund)

Learn from **other policies** for Cohesion Policy to **deal successfully with ‘new’ challenges**

- Take inspiration from ‘outside’ Cohesion Policy in order to keep up with a fast changing world (e.g. Global Value Chains and internationalisation)

# Cohesion Policy for inclusive impacts

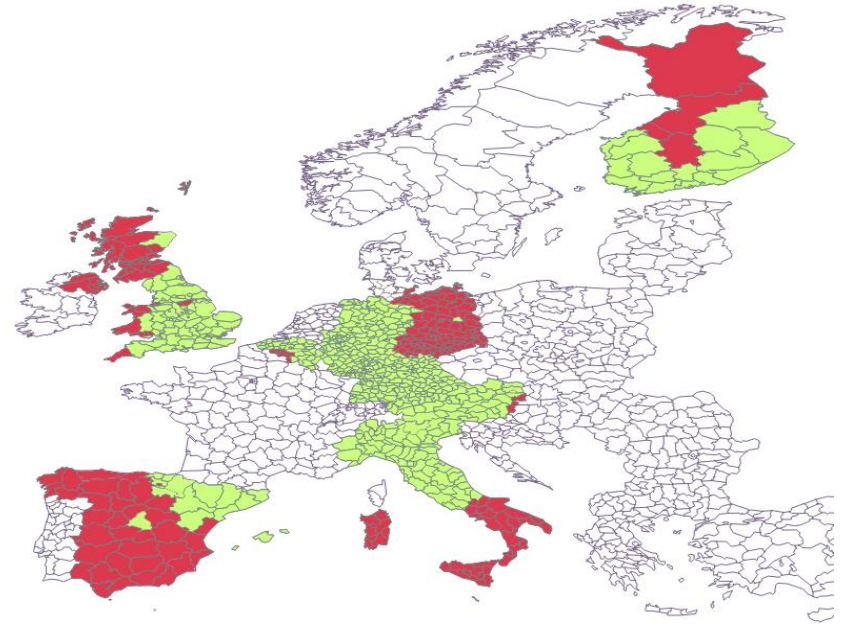
**New Challenge** - Cohesion Policy will operate (together with Next Generation EU) in regions affected by a major pandemic shock. How to build 'resilience' in all regions?

**Evaluation Methods & Data** - Spatial Regression Discontinuity Design (RDD) estimates distinct but fully comparable regional impacts for each individual Member State before the Crisis and during Recovery

**Evidence** - Positive EU-wide impact on regional employment that survived the Great Recession and supported less developed regions in the recovery period

Regions in Germany and the UK 'kept' their bonus after the Crisis vs. regions in Italy and Spain that 'lost' their advantage with the Great Recession

**Lessons** – Addressing institutional and governance conditions should be a priority in order to 'build' resilience



*Treated NUTS-3 regions (Objective 1 regions in 2000-2006) in red. Counterfactual NUTS-3 regions in green*

# Cohesion Policy for timely Recovery

		'Traditional' Projects	Digital & Green Projects	Total
On time	#	249,736	9,945	259,681
	%	88.24	69.83	87.36
Light delay	#	15,780	1,253	17,033
	%	5.58	8.80	5.73
Severe delay	#	17,494	3,044	20,538
	%	6.18	21.37	6.91
Total	#	283,010	14,242	297,252
	%	100.00	100.00	100.00

## 'Digital and Green' projects by completion status – 2014-2020 Cohesion Policy - Italy

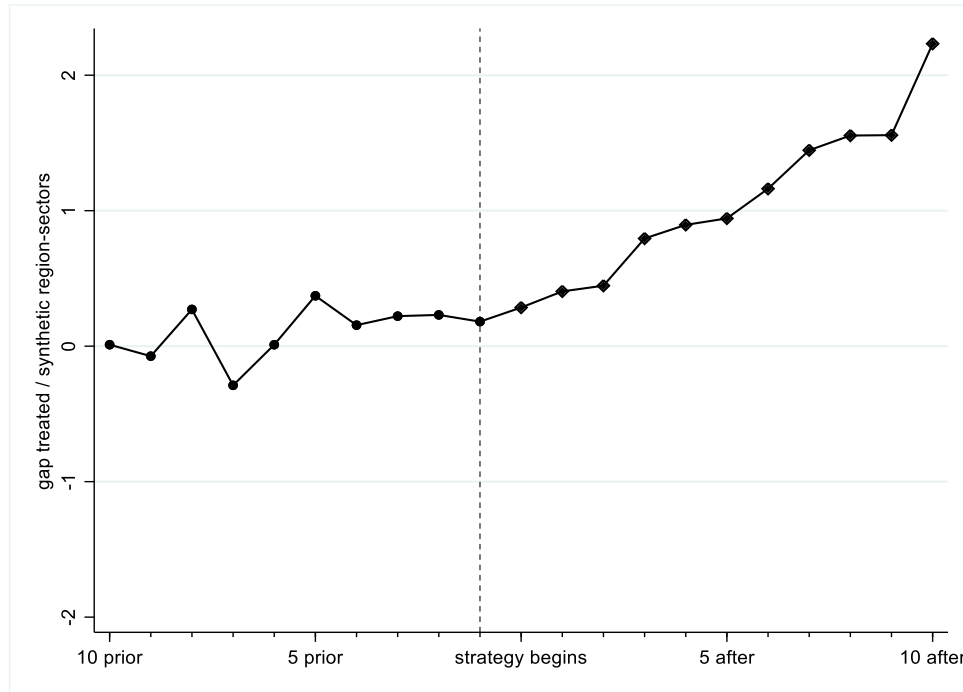
**New Challenge** - Cohesion Policy will impact the same territories as the Recovery Fund. How to support the digital and green transitions in all regions for timely impacts?

**Evaluation Methods & Data** - Textual analysis at the project level combined with regression methods shed light on what correlates with timely implementation.

**Evidence** - Digital and Green projects are inherently more prone to implementation delays in particular in 'weaker' regions

**Lessons** - The direct involvement of citizens through participatory procedures led by central governments can significantly cut delays.

# Cohesion Policy for Global Value Chains



## Impact of Investment Promotion Agencies in Europe

Treated/synthetic region-sectors and estimated gap, 2003-2017  
(less developed regions)

**New Challenge** - In the 'new world order' attracting and embedding GVCs through FDI is central to regional development and Cohesion Policy

**Evaluation Methods & Data** - Combination of innovative survey on FDI promotion covering virtually all EU regions and diff-in-diff and synthetic control methods.

**Evidence** - Regional Investment Promotion Agencies are **highly effective in attracting knowledge intensive investments to less developed regions (+71% vs. non treated sector/regions)**

**Lessons** – Investment eco-systems are built at the local level. **Cohesion Policy can effectively support regions in attracting and embedding FDI**




**Riccardo Crescenzi**

London School of Economics

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**LinkedIn**  [linkedin.com/in/riccardocrescenzi](https://www.linkedin.com/in/riccardocrescenzi)

 [@crescenzi\\_r](https://twitter.com/crescenzi_r)

# Key References

Crescenzi R. and Giua M. "[One or many Cohesion Policies of the European Union? On the differential economic impacts of Cohesion Policy across Member States](#)", *Regional Studies*, 254:1, 10-20, 2020

Crescenzi R., Di Cataldo M. and Giua M. "FDI inflows in Europe: does investment promotion work?" *Journal of International Economics*, in press, 2021

- Read also our LSE GILD Blog column : <https://blogs.lse.ac.uk/gild/2019/02/21/what-policies-work-for-fdi/>

Crescenzi R., Giua M. and Sonzogno G. "[Mind the Covid-19 crisis. An evidence-based implementation of Next Generation EU](#)", *Journal of Policy Modelling*, 43(2), 278-297, 2021

- Read also our EUROPP column : <https://blogs.lse.ac.uk/europpblog/2021/02/15/next-generation-eu-how-the-eus-covid-19-recovery-fund-should-be-implemented/>

# Evaluating EU Cohesion Policy Using Satellite data

Project on behalf of Bertelsmann Stiftung,  
joint work with ifo Institute and the German Aerospace  
Center

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Julia Bachtrögler-Unger, Mathias Dolls, Paul  
Schüle, Hannes Taubenböck, Matthias Weigand



| BertelsmannStiftung



# Nightlight Emissions in Europe 2000



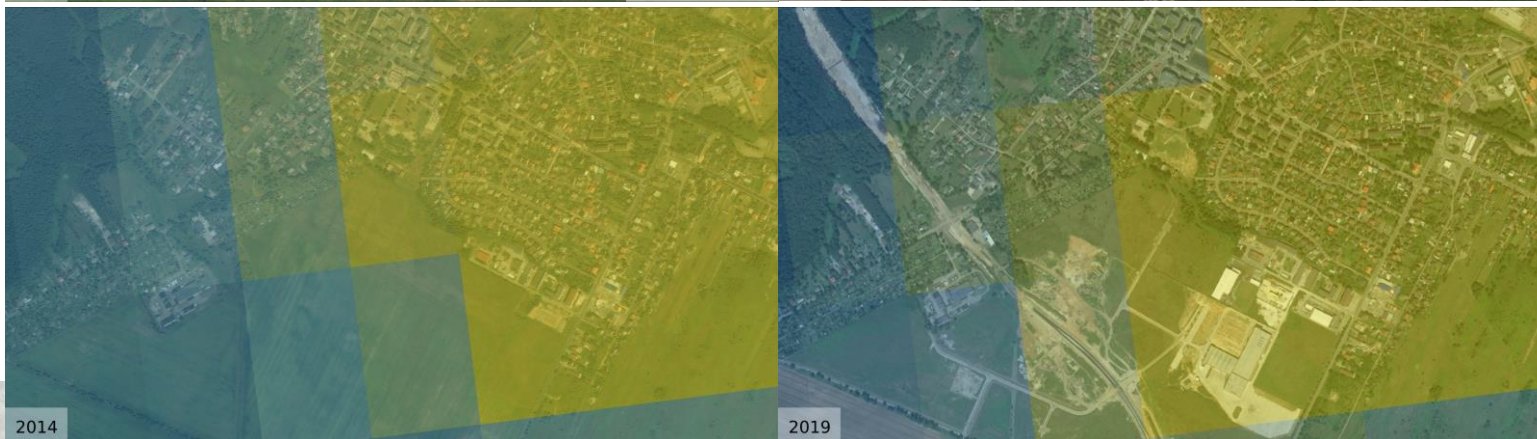


# Nightlight Emissions in Europe 2019



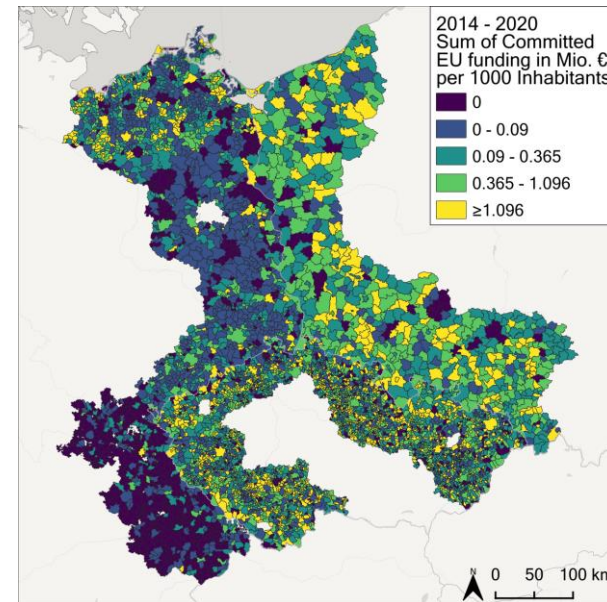
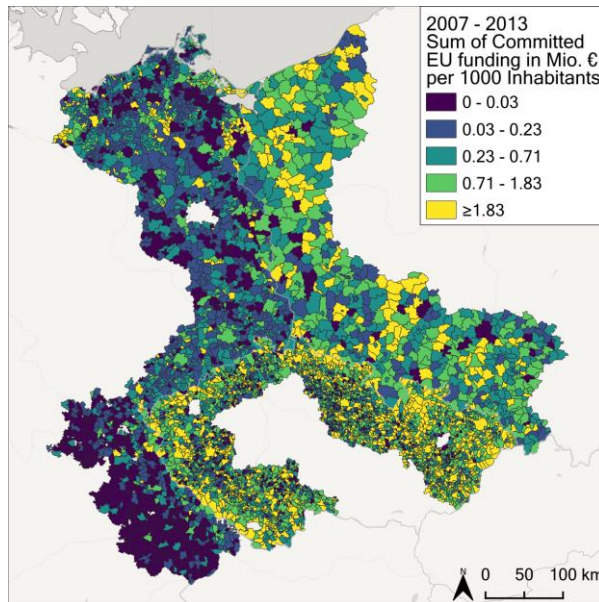
# Motivation

Map data © 2021  
CNES/Airbus, Google.



# EU Cohesion Policy and the Development of Nightlight Emissions

- Pilot region: municipalities in border region of CZ, DE and PL
- **Does EU cohesion policy affect the local development of economic activity, proxied by nightlight emissions?**



# WIFO

ÖSTERREICHISCHES INSTITUT FÜR  
WIRTSCHAFTSFORSCHUNG

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Twitter: @JBachtroegler



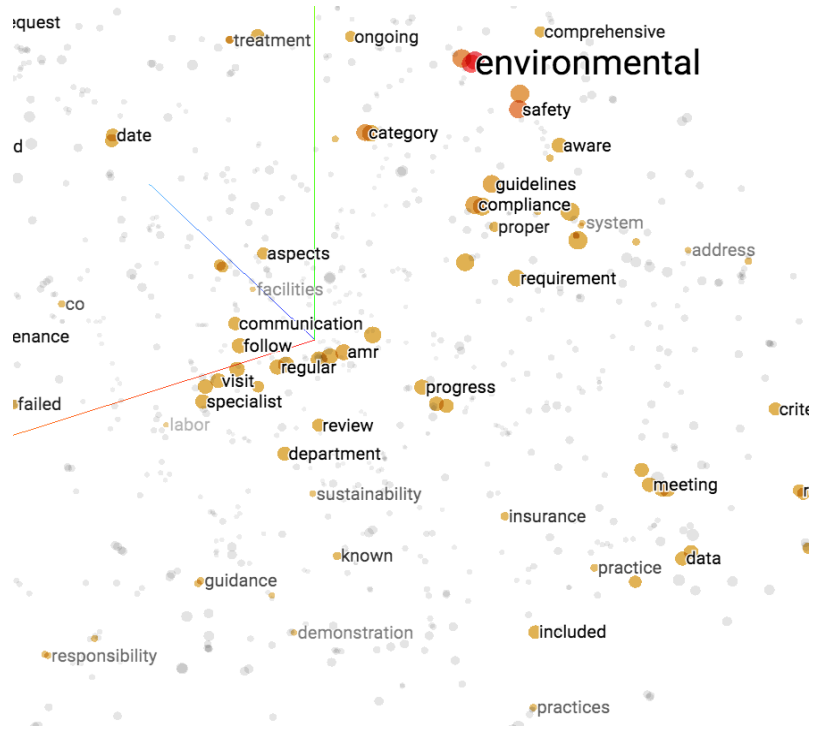
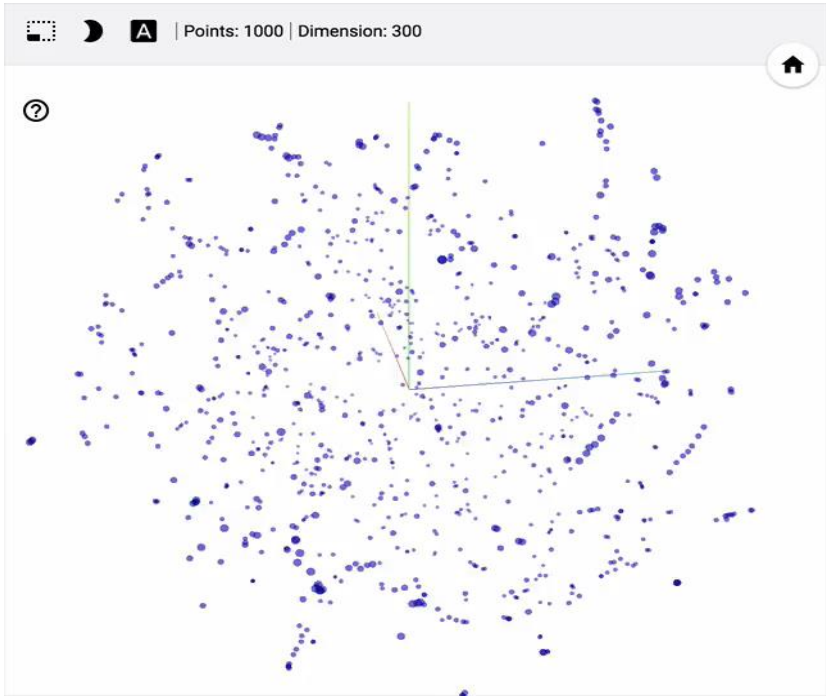
# Dealing with complexity in evaluation through the use of data science applications

Shaping Transitions with Evidence

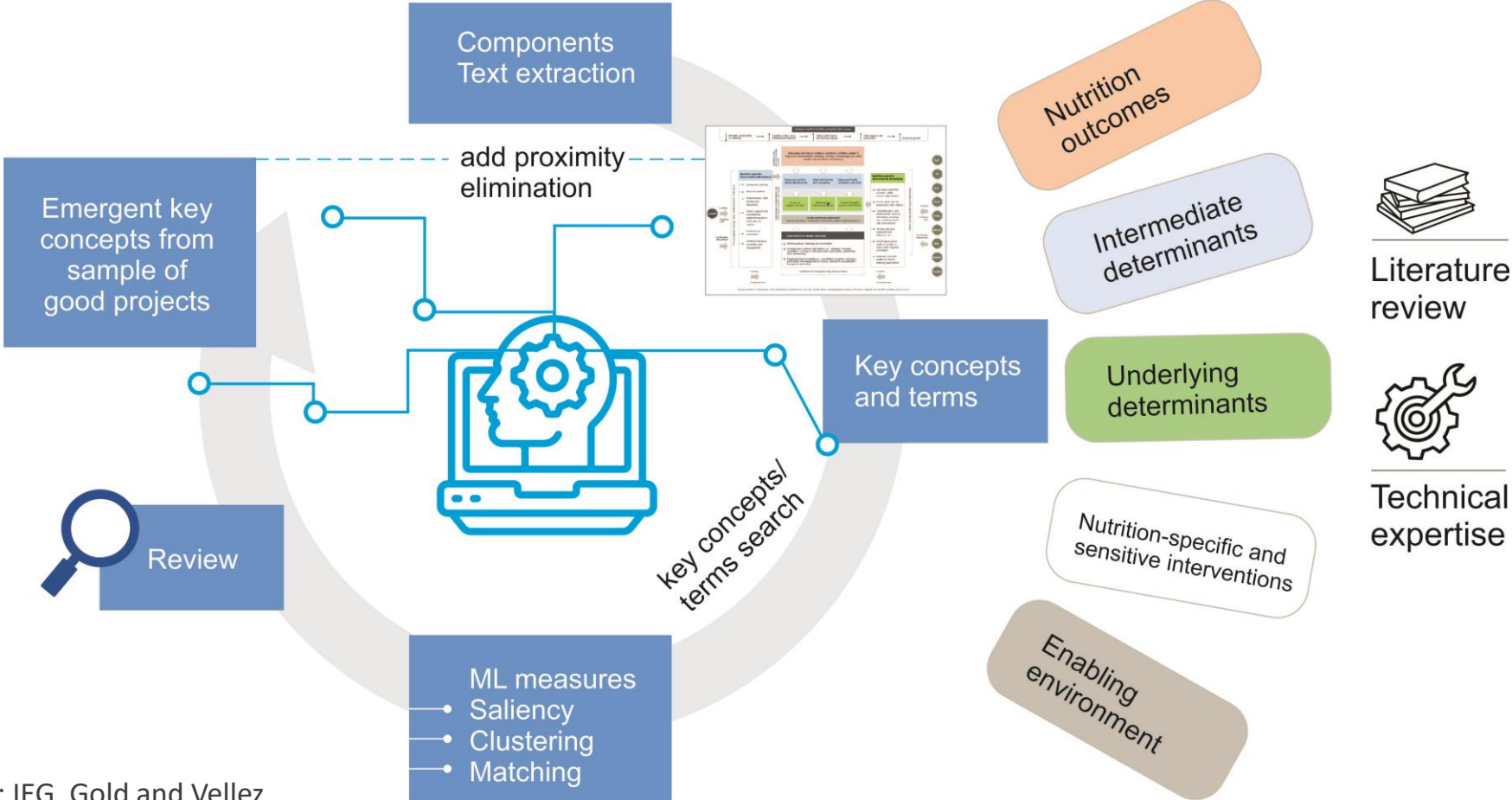
The 9<sup>th</sup> Conference on the Evaluation of EU Cohesion Policy

Jos Vaessen, PhD  
September 16, 2021

# 1. Evaluators as synthesizers: example private sector development projects evaluative synthesis



# 2. Identifying the evaluand: example global evaluation WBG support to combat undernutrition



Source: IEG, Gold and Vellez

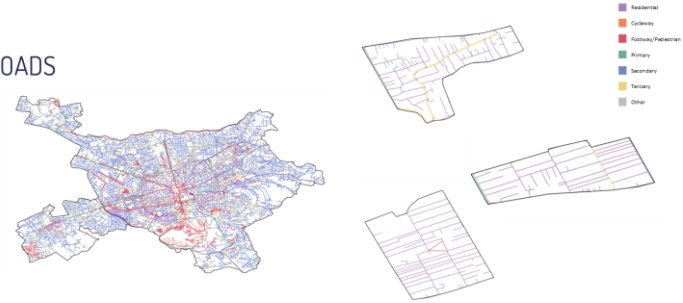
# 3. Using big data for evaluative analysis: example geospatial data Tirana (urban development)

## URBAN FABRIC



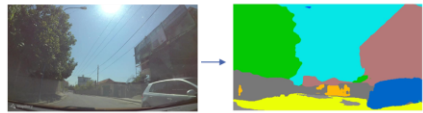
	Total Area (m <sup>2</sup> )	Urban Fabric (m <sup>2</sup> )	Residential and Commercial (m <sup>2</sup> )	Parks and Forests (m <sup>2</sup> )	Cemetery (m <sup>2</sup> )	Military (m <sup>2</sup> )	Others (m <sup>2</sup> )
Tirana	39,998,805	31,763,400	28,379,611	2,729,500	232,704	323,568	98,048
Bathore	454,457	452,127	448,366	3,761	0	0	0
Zone 2	298,176	295,008	295,008	0	0	0	0
Zone 3	589,747	589,747	589,747	0	0	0	0

## ROADS



	Total Area (m <sup>2</sup> )	Total Roads (m)	Residential (m)	Cycleway (m)	Pedestrian/Footpath (m)	Primary (m)	Secondary (m)	Tertiary (m)	Others (m)
Tirana	39,998,805	962,326	470,524	39,231	68,875	40,064	48,846	60,621	234,165
Bathore	454,457	12,114	5,076	0	239	895	753	2,903	2,248
Zone 2	298,176	7,536	5,584	0	10	505	285	395	757
Zone 3	589,747	11,145	9,670	0	415	0	190	4	867

## Streetscape Images



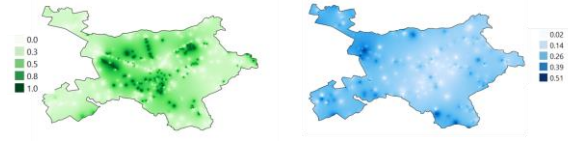
**Example:** Semantic segmentation of a street-level image from Tirana (Albania). The information extracted from 800+ images was used to derive a map showing the level of greenness across different parts of the city.

## BUILDINGS



	Total Area (m <sup>2</sup> )	Buildings Area (m <sup>2</sup> )	Number of Buildings	Min. Building Area (m <sup>2</sup> )	Avg. Building Area (m <sup>2</sup> )	Max. Building Area (m <sup>2</sup> )
Tirana	39,998,805	3,552,670.00	12,281	1.7	289	18,826
Bathore	454,457	96,325.80	762	2.3	126	1,174
Zone 2	298,176	55,012.30	452	0.2	122	19,669
Zone 3	589,747	96,860.10	762	4.0	127	1,073

## GREENNESS AND SKYVIEW



- Greenness: areas in central parts of the city have a large concentration of green areas due to the existence of parks and a larger number of trees along main trees. Areas in the periphery of the city with a high concentration of green areas mostly correspond to forests.
- Skyview: areas in the periphery of the city have the most sky view (around 50%) due to low development density.
- Maps were produced applying IDW interpolation algorithm.

- **Description:** high resolution street-level imagery.
- **Source:** GoogleEarth, Mapillary, others.
- **Data type:** images.
- **Spatial coverage:** worldwide
- **Temporal coverage:** mostly available for recent years. Timeseries analysis with this data might prove difficult.
- Particularly useful for in-depth analysis of smaller geographic areas (e.g. cities) in the context of urban development projects. Different techniques allow to process a large amount of images in a short amount of time and extract its relevant features (such as roads, cars, buildings, sky, etc.). These features can be geocoded and mapped.



Thank you!





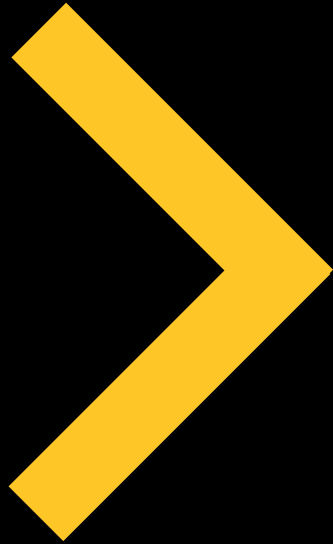
# 9th Conference on the Evaluation of EU Cohesion Policy

16-17 September 2021

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Katerina Mantouvalou  
Director - Public Policy





**Evaluation  
cornerstones that  
should be  
maintained**

# Evaluation of the Electrification of Heat Demonstration Project



Online Theory of change (ToC) development and validation workshop

## Managed to:

- ✓ Review, amend and sign off the model
- ✓ Demonstrate and discuss the draft model and make changes in real-time

## Missed:

- ✗ Anything!

# Assessment of the impact 'stay at home orders' had on women during the Covid-19 pandemic



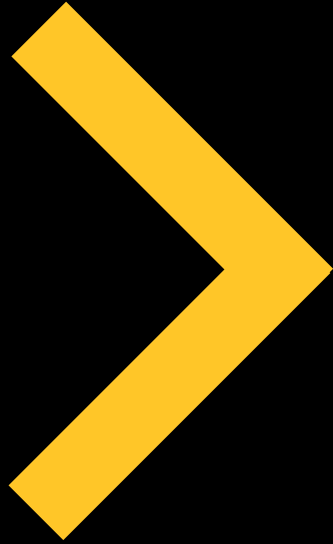
**Data analytics** (Google trends and website traffic data) showed a sharp increase in searches of the term 'domestic violence' and visits to the websites of organisations assisting victims during the pandemic.

## **Managed to:**

- ✓ Solid evidence about the immediate negative impact of a policy on a specific group

## **Missed:**

- ✗ Qualitative insights about the needs of victims and how to assist them



# Evaluation cornerstones revisited



# Thank you!

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[icf.com](https://www.icf.com)

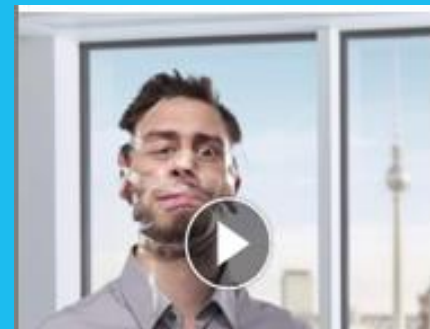
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#### **About ICF**

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# #EU AND ME

Films | Banners | GIFs





# #EU AND ME M&E

People reached . . .

were **interested and inspired** by the campaign messages

were **better informed** about the contributions of the EU to their daily lives

take action to **search for more** information about the campaign topics

have experienced a positive influence on their **trust in the EU**



Online panel survey



Focus group



On the spot data collection



Campaign hub traffic metrics

# #EU AND ME

Analysing the website traffic we collected a wealth of information about the journey of the those reached by campaign material.

We learned whether...

the campaign was  
**successfully  
launched**

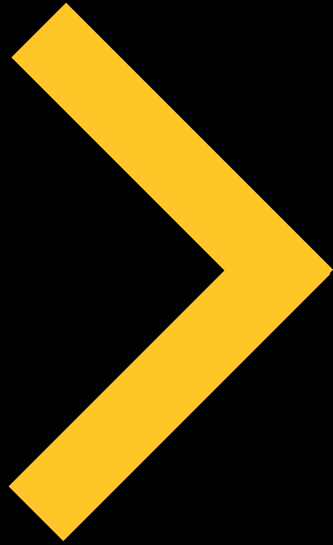
individual interest in  
the campaign was  
**continuously  
high**

individuals  
**searched other  
sources** after  
visiting the campaign  
hub

they **interacted  
with the  
campaign  
content**, and, if so,  
when and how

However, website traffic can only say part of the story for the evaluation...

The full scale and quality of interaction could not be assessed through the campaign hub. Surveys with 36,000 respondents, individual interviews and focus groups shed light into it.



# Success factors



# Thank you!

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# Appendix

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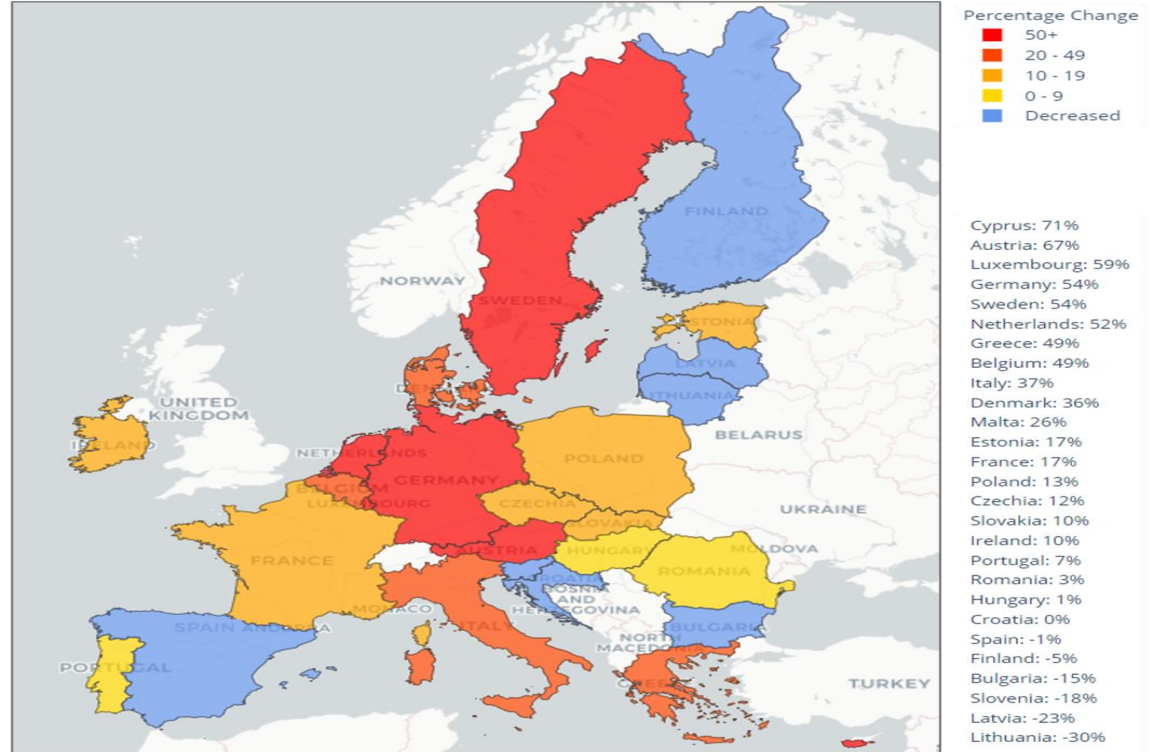
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# Assessment of the impact 'stay at home orders' had on women during the Covid-19 pandemic

## Google trends

Google searches for *domestic violence* and related terms 2016 - 2021 within the EU 27  
Percentage change from the pre-pandemic mean search rate since the onset of the Covid-19 pandemic (01 March 2020)



# Assessment of the impact 'stay at home orders' had on women during the Covid-19 pandemic

## Website traffic data

Solidarité Femmes



Veilig Thuis



Weisser Ring



Fundación Ana Bella



Women's Aid



Kvinnofridslinjen



Associazione Nazionale D.I.R.e contro la Violenza



# Electrification of Heat Project

## Theory of Change Workshop

26 June | 13:00 – 16:30

**Facilitator:**  
Avril Blamey, supported by Jen Ku

**Invite List:**  
Andrew Jarvis, James Leather & colleagues at ICF  
Adam Cowland & colleagues at BEIS & ESC

### Some tech introductions...

**M MURAL – VIRTUAL WHITEBOARD**  
The tool we are operating on is called Mural. It's like a whiteboard but virtual! Avril and Jen will lead you through the experience today.

**CAMERA ON! SPEAKER ON!**  
To get a great session, we kindly ask everyone to try to turn off their notifications if possible this afternoon.

**DISCUSS AND SPEAK UP!**  
Like in an office setting, we need contribution! While you won't be using Mural hands on today, we need everyone's voice to help shape the outcome.

**LISTEN, PARTICIPATE AND ENGAGE!**  
To get a great session, we kindly ask everyone to try to turn off their notifications if possible this afternoon.

Be patient with virtual discussion and with technology!

Activity - Pre installation publicity, recruitment,

household survey - training

Activity - Installation of 750 heat pumps in range of [challenging] contexts

Activity - Post installation support for use, maintenance and monitoring of system and energy management

Activity - Evaluation of recruitment, installer and home owner experiences (analysis of cost /use /other data) and dissemination of learning and tools

