



# Composite indicator on cultural and creative cities: monitoring cultural & creative sectors in European cities

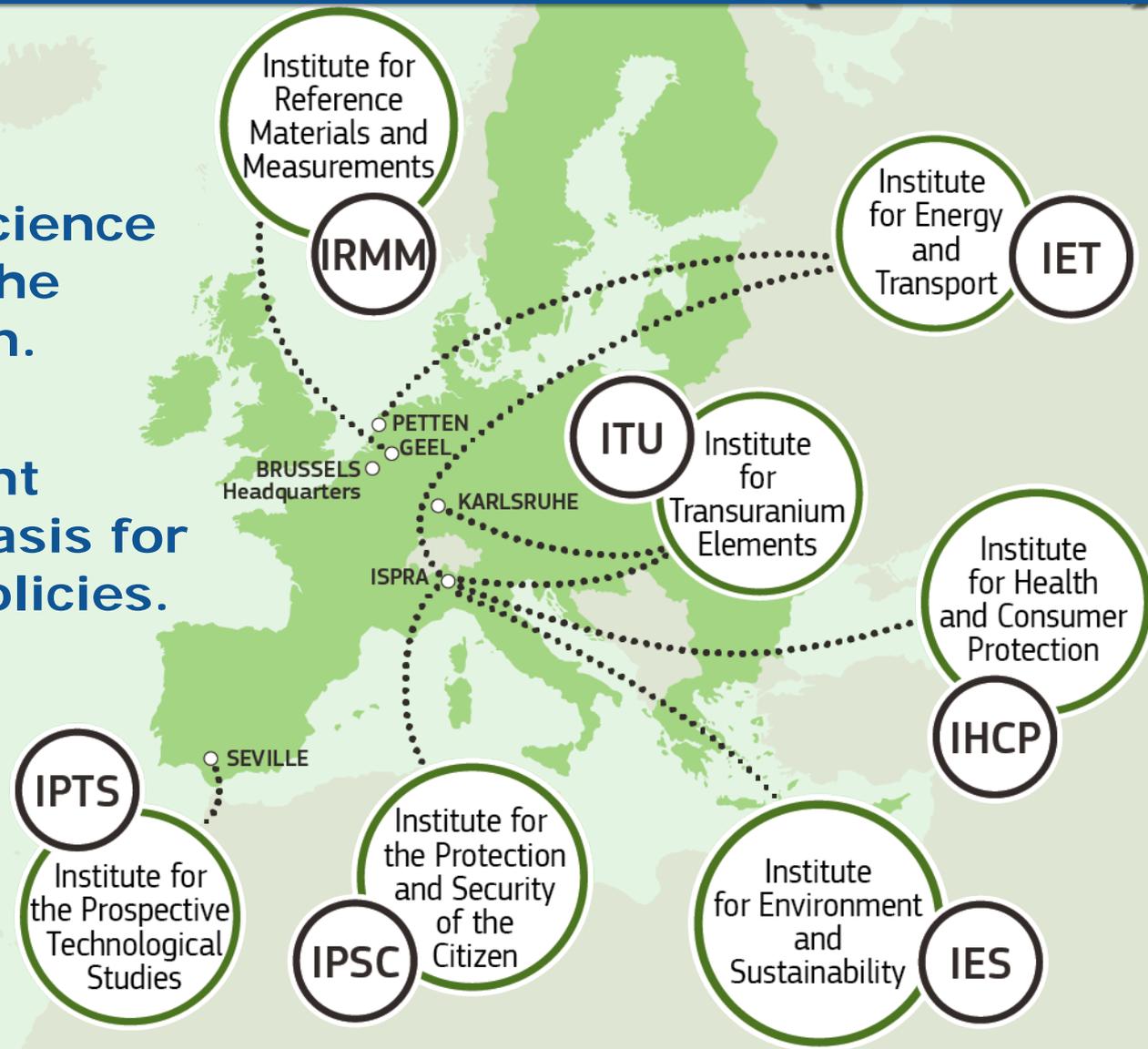


*Pawel Stano,  
Michaela Saisana, Dorota Weziak-Bialowolska*

European Commission Joint Research Centre  
Econometrics and Applied Statistics Unit,  
Composite Indicators Research Group (JRC-COIN)

# Joint Research Centre (DG JRC)

- In-house science service of the Commission.
- Independent scientific basis for many EU policies.



Science Hub:

<https://ec.europa.eu/jrc/>



# COIN activities – 4 lines



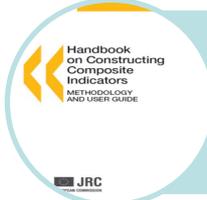
## Support to EC

Regional Europe 2020 Index (in the 2014 WEF's report and in the EC 6<sup>th</sup> Cohesion Report), Regional Multidimensional Poverty Index,...



## Collaborations with international partners

Global Innovation Index 2014, WJP Rule of Law 2014, Environmental Performance Index 2014, Corruption Perceptions Index 2012



## Methodology

In-house developed quality control frame (conceptual coherence, multivariate analysis, sensitivity analysis, multi-criteria decision analysis, statistics and policy)



## Training

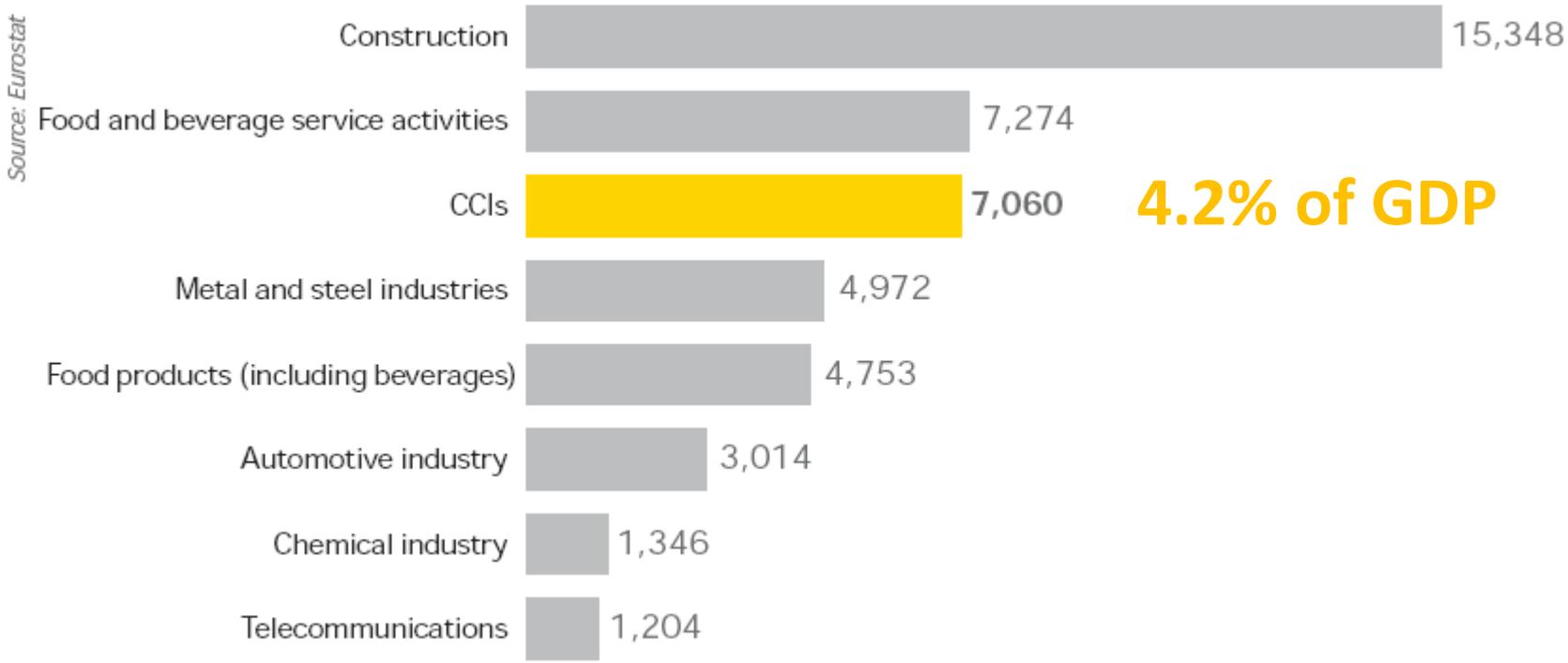
04/2013 WEF-Geneva; 07/2013 Istanbul; 22-26/09/2014 Ispra  
(over 50 trainings in the last 12 years)

The COIN know-how on composite indicators is requested by over 100 international partners: UNO, UNICEF, OECD, WEF, INSEAD, WIPO, UN-IFAD, FAO, Harvard U., Yale U., Columbia U., Cornell U., ...



# Why are we interested in the CCS?

## Employment (in thousands) 2012



Source: Ernst and Young

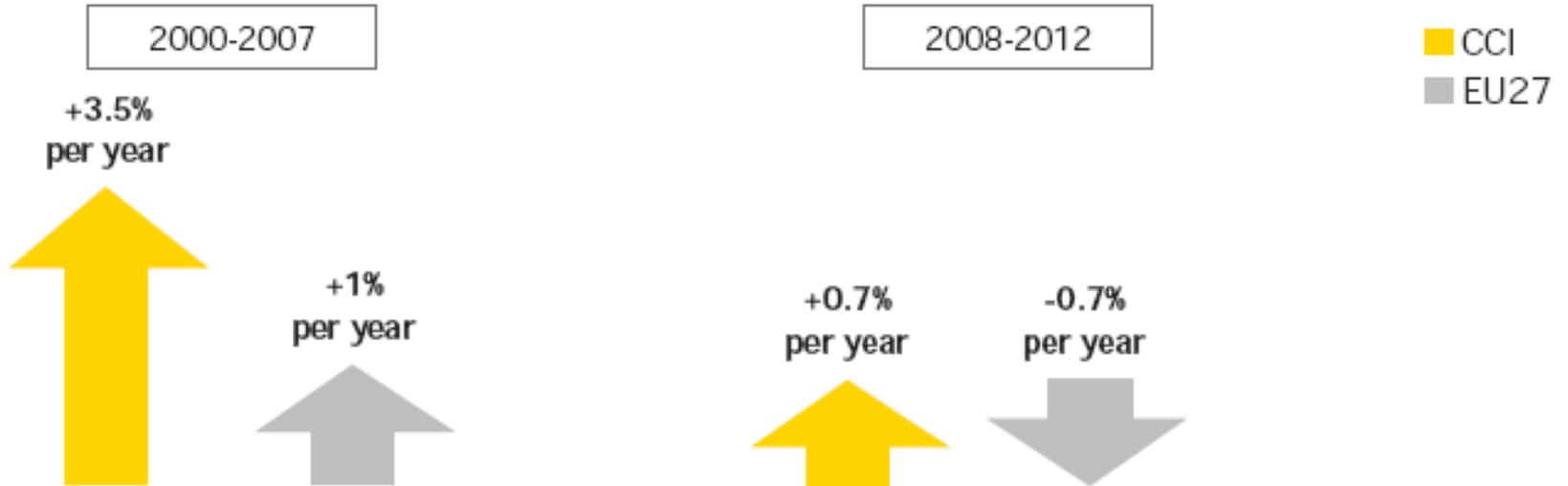


# Job creation

A fast growing sector...

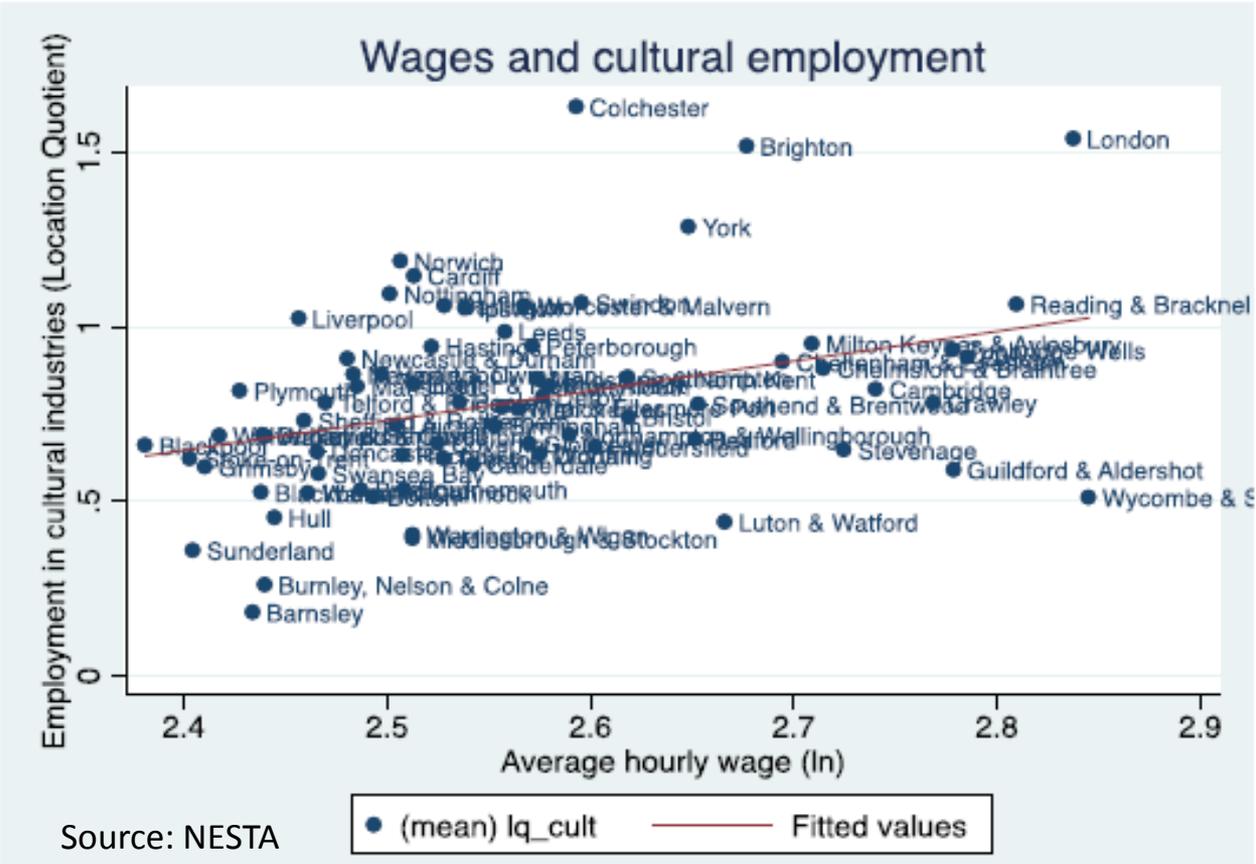
... that withstood the economic crisis

Source: EY





# CCS and urban policies



- cities are replacing nation-states as key units of global competition
- cultural and creative sectors tend to concentrate around large and medium urban areas
- cities with stronger cultural clusters tend to have higher average wages



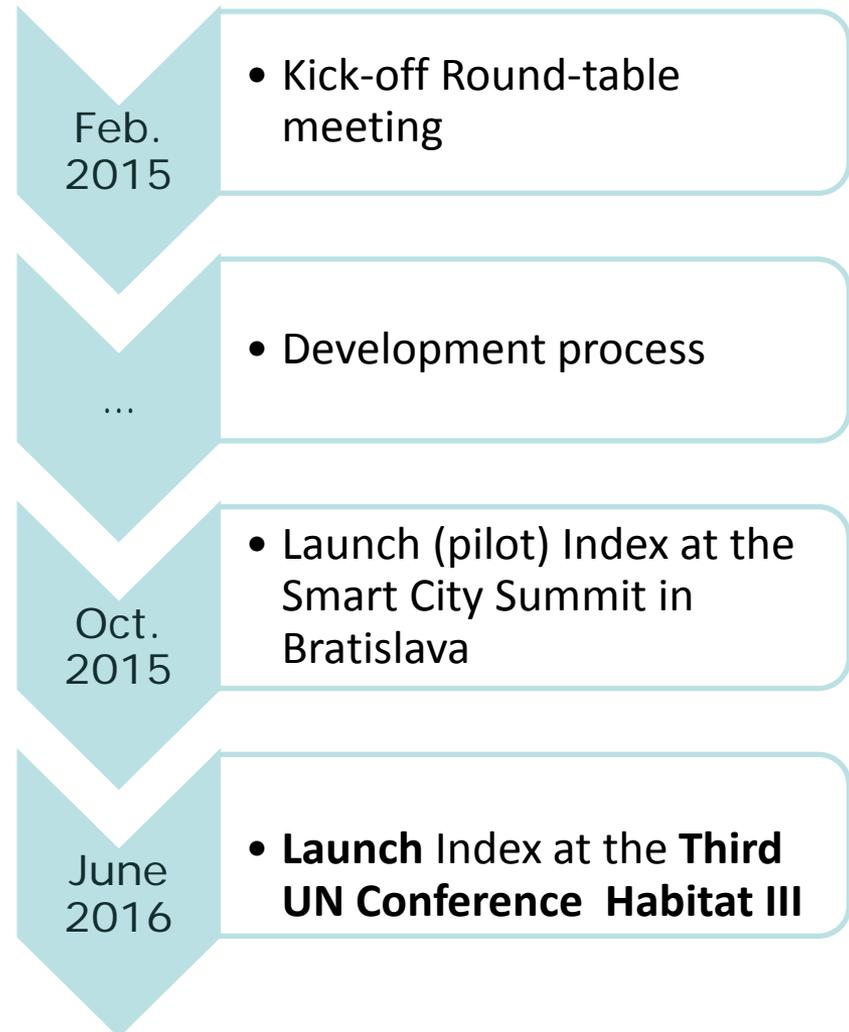
## Ongoing initiatives of the European Commission

- Creative Europe Program (1.8 billion EUR in 2014-2020)
- Creative Europe Desks
- European Capitals of Culture
- European Heritage Label
- Cultural and Creative Sectors Guarantee Facility
- ...
- Cultural and Creative City Index



## Partners

- Joint Research Centre,
- DG on Urban and Regional Policy,
- DG Education and Culture,
- DG Communications Networks, Content and Technology,
- European Centre for Creative Economy,
- European Cultural Foundation,
- European Network of Cultural Administration Training Centers,
- World Intellectual Property Organization,
- Université Libre de Bruxelles





## Desirable features of new Index

- ✓ Full transparency and open access data;
- ✓ Benchmarking with peer cities based on the economic level and population size;
- ✓ detailed interpretation of results and city profiles (best practices, bottlenecks);
- ✓ **conceptual and statistical coherence;**
- ✓ two complementary versions - a “standardised” and a “flexible” one.



## JRC overview of 40+ indices on cultural and creative activities

### A total of 16 dimensions

- 1) Tourism
- 2) Creative Output & Employment
- 3) Cultural Capital & Participation
- 4) Culture and recreation related Venues, Resources & Facilities
- 5) Living conditions
- 6) Transportation & Accessibility
- 7) Globalization & Networks & Exchange
- 8) Social Capital: Openness, Tolerance
- 9) Human Capital, Talent & Education
- 10) Government & Regulations: fundings and rule of law
- 11) Economy
- 12) Entrepreneurship
- 13) Innovation & Research
- 14) Technology & ICT
- 15) Environment & Ecology
- 16) Input for the CCS

# State of the art



	Country level	City level	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
ARC Creative City Index		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓		
Florida's Creative Cities Index		✓		✓						✓	✓				✓			
2014 Global City Index		✓	✓			✓			✓	✓	✓		✓			✓		
Hong Kong Creativity Index		✓		✓	✓								✓	✓	✓			
The European Creativity Index	✓			✓	✓	✓				✓	✓	✓				✓		
Global Creativity Index	✓									✓	✓				✓			
Euro-Creativity Index	✓			✓						✓	✓				✓			
Global Power city Index		✓	✓			✓	✓	✓	✓		✓	✓	✓		✓		✓	
Creative Grid		✓		✓		✓			✓	✓	✓	✓						✓
Creative Space Index (CSI)	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Smart Cities		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Cities of Opportunity		✓	✓		✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	
Composite Index of the Creative Economy	✓									✓				✓	✓	✓		
Landry's Creative City Index		✓		✓			✓		✓	✓	✓	✓		✓	✓			
Shift Index		✓						✓	✓		✓	✓	✓			✓		
Cultural Life Index	✓			✓	✓	✓					✓					✓		
Global City Indicators		✓		✓			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	
Quality of Living Survey		✓	✓		✓		✓	✓			✓	✓	✓				✓	
Intercultural Cities Index		✓			✓		✓		✓	✓	✓	✓	✓			✓		
Sharpie's Creativity Index		✓		✓	✓		✓			✓	✓				✓		✓	
World Knowledge Competitiveness Index	✓											✓	✓		✓	✓		
Creative Economy	✓	✓													✓	✓		
Creative Community Index	✓			✓	✓		✓		✓		✓	✓						✓

## Example:

# Florida’s Creative City Index /Global Creativity Index



Talent



Technology



Tolerance

- One of the most often cited indices
- Focuses on “people climate” instead of “business climate”
- Limited number of dimensions to assess such a complex phenomenon as creativity (cultural aspects are not included)
- Issues of conceptual and statistical coherence

# Problems with the state of the art



Conceptual challenges	Practical problems
<p>1. Lack of precise definitions of the CCS, which creates a lot of confusion in the debate and increases the chances of miscommunication &amp; misunderstanding</p>	<ul style="list-style-type: none"> <li>• Too broad definition of creativity, aka mixing creativity with non-CCS related concepts</li> <li>• Too many CCS-related indicators (e.g. over 80) put together, which results in relevant information being lost in aggregation</li> </ul>
<p>2. Existence of different socio-economic structures within Europe, which makes it difficult to design one uniform framework that fits all and does not reflect one particular model</p>	<ul style="list-style-type: none"> <li>• Limited number of cities included in an index</li> <li>• Limited number of dimensions included in an index (danger of cultural “imperialism”)</li> </ul>
<p>3. Difficulties in capturing the economic spill-over effects</p>	<ul style="list-style-type: none"> <li>• Analysis done at too general level (e.g. only country level)</li> <li>• Index is built on specific data (e.g. personal interviews and surveys) from specific regions</li> </ul>
<p>4. Lack of unified CCS-related data structure across the European cities, which makes the comparability of cities problematic</p>	<ul style="list-style-type: none"> <li>• Insufficient information about metrics and methodology provided by the developers</li> <li>• Insufficient or complete lack of conceptual or statistical analysis of the index</li> </ul>
<p>5. Difficulties in designing a framework that encourages strategic thinking and supports long-term urban policies</p>	<ul style="list-style-type: none"> <li>• Insufficient benchmarking with peers</li> <li>• Too general (focus only on the final rankings). Lack of detail analysis tailored to specific local conditions</li> </ul>

## Existing Indexes – Examples of CCS-related dimensions and indicators

DIMENSION	EXAMPLE OF INDICATORS	INDEX
<b>Creative Output &amp; Employment</b>	Percentage of workforce defined as the 'creative class'	Florida's Creative Cities Index
	Share of services trade of creative industries relative to total services trade	Hong Kong Creativity Index
	Size of the creative sector (dollars at PPP)	ARC Creative City Index
<b>Liveability &amp; Amenities</b>	Quality of life	Quality of Life Index
	Well-being	Creative Space Index
	Living environment	Global Power City Index
<b>Transportation &amp; Accessibility</b>	Incoming/outgoing passengers flows	Cities of Opportunity
	Public transport network per inhabitant	Smart Cities Index
	international freight (tonnes)	ARC Creative City Index

## Examples of Indicators of culture and creativity

	Extensive indicators	Intensive indicators
<b>Venues &amp; Resources</b>	Number of museums (nso)	Number of museums per capita (nso)



*Pawel.Stano@jrc.ec.europa.eu*

*<https://ec.europa.eu/jrc/en/coin>*