



BRIDGES project, 5<sup>th</sup> call, additional activities: policy instrument improvement recommendations, PP4 Regional Council of Helsinki - Uusimaa

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# 1. Background

## 1.1 Objective

The policy instrument improvement recommendations are final deliverables of the additional activities of the BRIDGES project approved under the 5<sup>th</sup> call of the Interreg EUROPE (IE) programme, on 31.5.2021. As a result of the relatively limited time (12 months) allocated to the additional activities, actual policy impact was not possible to achieve. Nevertheless, during these 12 months, it has been possible to test a value chain mapping methodology in five (5) regions, reach conclusions relating to re-shoring, in-shoring and near-shoring of value chain segments, identify and select good practices, and develop interregional relatedness opportunities and profiles. The purpose of the policy instrument recommendations is to prepare regions for mainstreaming these findings during the forthcoming RIS3 update period in 2023.

## 1.2 The BRIDGES project 5th call, additional activities

The objective and content of the 'additional activities' should be understood as an extension (partially), a deepening and a systematisation of the BRIDGES project insights gained during Phase 1 (2016-2019), aiming at improved RIS3 implementation through interregional collaboration. The starting argument of the BRIDGES project was addressing mismatches between the economic and knowledge bases of the partner regions as a precondition for more effective & more visible RIS3 results. During Phases 1 & 2 of the project, interregional complementarities were further tested through the BRIDGES pilot action. The pilot action tested the conditions and contexts in which interregional complementarities would be/are essential for the RIS3 implementation of the respective regions. The pilot action findings indicate that addressing interregional complementarities is an essential dimension of the RIS3 -provided regions are prepared to understand the potential for addressing contextual advantages and structural barriers, i.e. they go beyond conjectural opportunities and corresponding gaps/challenges.

The BRIDGES project additional activities focus on interregional complementarities as a RIS3 tool based on value chain policies. This is done by re-shoring, inshoring & near-shoring productive activities based on value chain (VC) analysis selected by the regions. Linking interregional complementarities to VC-based development and to regional resilience, was inspired by the EC's New Industrial Strategy<sup>1</sup> and the EPRS, PE 653.626 – March 2021 study<sup>2</sup>, arguing how geographically diversified production structures result in

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<sup>1</sup> Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery, COM (2021) 350 final. "In the areas of common dependencies with its partners, the EU may choose to pool resources and build stronger and more diverse alternative supply chains with our closest allies and partners", p13. [https://ec.europa.eu/info/sites/default/files/communication-industrial-strategy-update-2020\\_en.pdf](https://ec.europa.eu/info/sites/default/files/communication-industrial-strategy-update-2020_en.pdf).

<sup>2</sup> Post Covid-19 value chains: options for reshoring production back to Europe in a globalised economy. [https://www.europarl.europa.eu/thinktank/en/document/EXPO\\_STU\(2021\)653626](https://www.europarl.europa.eu/thinktank/en/document/EXPO_STU(2021)653626).

<http://www.interregeurope.eu/bridges/>

reinforced regional clusters, contributing to the resilience of economies<sup>3</sup>. VC re-, in- & near- shoring drivers are identified as<sup>4</sup>: product design, innovation (R&D), flexibility, quality, market proximity & addressing VC weaknesses (e.g. Green Deal gaps). These arguments, favouring VC-based policy measures were further reinforced: we became increasingly aware that (1) value-chain based policies are and will be more and more important strategic & diversification tools; (2) the impacts of the Ukraine war on the EU productive space. OECD<sup>5</sup> notes that “The substantial economic costs of the war, elevated uncertainty (p13)” and later on that “Exports will continue to benefit from deep integration into value chains (p181)”. Re-localisation has various dimensions. For example, OECD<sup>6</sup> notes that while through re-localisation countries have less exposure to external shocks, at the same time they risk becoming less efficient and stable in their production models. Therefore, it is important that re-localisation is combined with updated business & production models. These considerations allow scope for governments to “join efforts with businesses to improve risk preparedness” (page 8). In the BRIDGES project additional activities, two (2) good practice (GP) themes are dedicated to these issues<sup>7, 8</sup>, and eight (8) GPs have been identified, mostly from the EU and the USA (Good practices)

Project partners (PP) from Phases 1 & 2 participate in the additional activities except for PP1 (restructured as a result of municipal decisions) and PP3 (internal adjustment processes). All partner regions focus on RIS3: (i) the selected value chains are part of partner regions' RIS3 prioritised sectors. They were selected with the intention to explore and strengthen innovation-based growth; (ii) the RIS3, through the SF 2021-2027 Policy Objective 1 (PO1) 7<sup>th</sup> enabling condition on ‘interregional innovation investments’, provides the / an operational context.

<sup>3</sup> According to the EC, for example, the COVID-19 crisis affected the EU economy, across eco systems but not homogeneously. The crisis exposed the interdependence of global value chains and demonstrated the critical role of a globally integrated and well-functioning Single Market. The key issues highlighted by the crisis are: Borders restricting free movement of people, goods and services; Interrupted global supply chains affecting availability of essential products; Disruption of demand: 6.3% decline of EU economy; 60% of SMEs reported a fall in turnover in 2020; 24% fall in intra-EU trade in Q2 & Q3 2020; 1.7% SME employment decrease in 2020 - 1.4 million jobs; 45% of firms expected to reduce investment in 2021. [https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy_en) .

<sup>4</sup> The European Re-shoring Monitor [REM] (2018). <https://www.eurofound.europa.eu/publications/report/2019/reshoring-in-europe-overview-2015-2018> .

<sup>5</sup> OECD (2022), OECD Economic Outlook, Volume 2022 Issue 1: Preliminary version, OECD Publishing, Paris, <https://doi.org/10.1787/62d0ca31-en>. <https://www.oecd-ilibrary.org/sites/62d0ca31-en/index.html?itemId=/content/publication/62d0ca31-en>.

<sup>6</sup> Arriola, C., S. Guilloux-Nefussi, S. Koh, P. Kowalski, E. Rusticelli and F. Van Tongeren (2020), "Efficiency and Risks in Global Value Chains in the context of COVID-19", OECD Economics Department Working Papers, No. 1637, OECD Publishing, Paris. <https://www.oecd-ilibrary.org/docserver/3e4b7ecf-en.pdf?expires=1656179716&id=id&accname=guest&checksum=F42775C8A630F30A6106D8D2567733CA>.

<sup>7</sup> **GP Theme 1** Good practices about value chain mapping, identification of competitive advantage and decision-making criteria related to value chain re-shoring and nearshoring. **GP Theme 2** Good practices for anticipating interregional complementarities and including them into their S3 have not yet been addressed sufficiently (Balland and Boschma 2021).

<sup>8</sup> Balland P-A, and Boschma R. (2021). Complementary interregional linkages and Smart Specialisation: an empirical study on European regions. Article in Regional Studies · January 2021 DOI: 10.1080/00343404.2020.1861240. <https://www.researchgate.net/publication/348587340> .

Table 1 BRIDGES project, additional activities, policy instruments per region

Partner organisation		Region	Policy instrument	Timetable
PP 2 /LP	Regional Council of Kainuu	Kainuu, FI	RIS3 2021-2027	Revision in 2023
PP4	Regional Council of Helsinki - Uusimaa	Helsinki-Uusimaa, FI	RIS3 2021-2027	Revision in 2023
PP5	ANKO	Western Macedonia, GR	RIS3 2021-2027	Finalisation in 2023
PP6	SVDC	Western Slovenia, SI	Community-led Local Development (CLLD), LAG (local action group) Soča Valley	2021-2027
PP7	PBN	Western Transdanubia, HU	EDIOP PLUS and Szombathely 2030	2021-2027

### 1.3 Structure of the document

In addition to this introductory part, this document is organised into

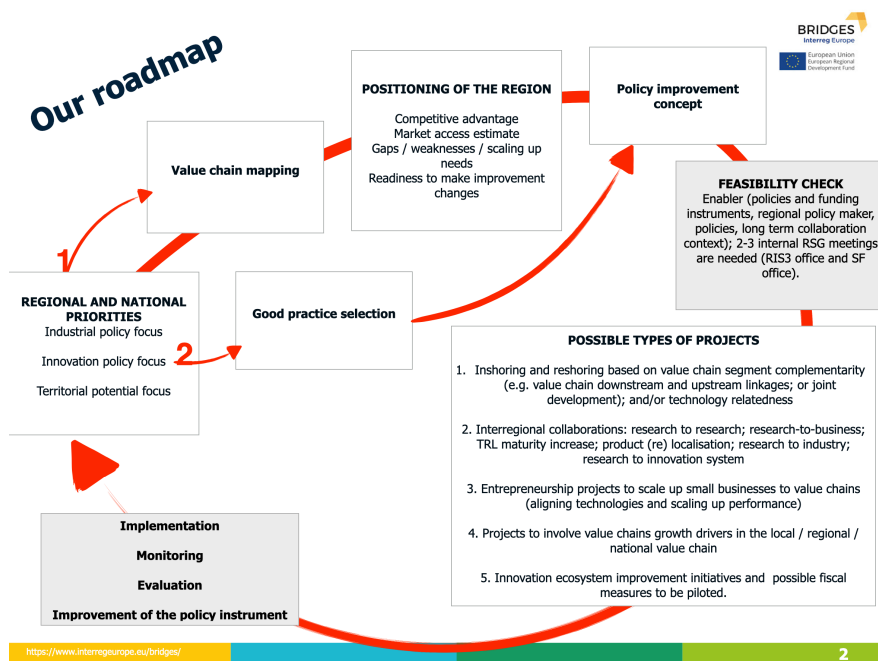
- 1.- Background (1.1 Objective, 1.2 The BRIDGES project 5th call, additional activities, 1.3 Structure of the document)
- 2.- Policy instrument improvement recommendations methodology
- 3.- The region and its RIS3 2021-2027 (3.1 Helsinki-Uusimaa region, 3.2 Helsinki-Uusimaa 2021-2027 RIS3)
- 4.- Good practices (4.1 Good practice identification, 4.2 Good practice selection)
- 5.- Value chain mapping (5.1 Value chain mapping methodology, 5.2 Value chain mapping results)
- 6.- Policy instrument improvement recommendations
- 7.- Conclusions: benefits from the additional activities

## 2. Policy instrument improvement recommendations methodology

The value chain mapping was expected to generate regional and interregional initiatives (Figure 1) which strengthen re-shoring and in-shoring relevant activities and coherently position/align such activities together with near-shoring (=off shoring), with the aim to reach VC-based strong and solid development paths. These initiatives are either new types of projects (Type 1 policy instrument impact according to the Interreg Europe terminology) or / and activities that strengthen the evidence base of the RIS3 and through that, the range of possible collaborations (Type 2 policy instrument impact according to the Interreg Europe terminology). For example, good practices 1, 4,5,9,10,11 are examples of potential Type 1 initiatives, while good practices 2,3,6,7 and 8 are examples of potential Type 2 initiatives (Figure 1 and Table 2 BRIDGES project additional activities, good practices (GP)).

The policy instrument improvement is intended to serve three purposes: (1) strengthen the regional productive base by inshoring and reshoring parts of segments of the selected value chains; (2) support interregional innovation investments and collaborations through value chain nearshoring opportunities; (3) support integrating value chain "thinking", value chain management as a development approach to be included into the range of RIS3 tools and development channels of the partner regions. The process for reaching the policy improvement recommendations is mapped in Figure 1 below. In the roadmap proposed in Figure 1, in addition to the expected regional stakeholder group meetings (RSG:s) there have been also formally included internal meetings, integrating the administration and decision making of the partner-organisations. Experience from several Interreg Europe and Interreg IV C projects, indicated that clear provisions for including such meetings are both needed and essential.

Figure 1 Policy improvement recommendations roadmap



## 3. The region and its RIS3 2021-2027

### 3.1 Helsinki-Uusimaa region

**Helsinki-Uusimaa** is the capital area of Finland. It has an area of 9 568km<sup>2</sup> and a population of 1 689 725 inhabitants. The Gross domestic product (GDP) of the region was 91.2 billion € in 2018, accounting for 38.9% of Finnish economic output. There are 26 municipalities in the region. GDP per capita adjusted for purchasing power was 43,500 € or 144% of the EU27 average in 2018. The GDP per employee was 120% of the EU average<sup>9</sup>.

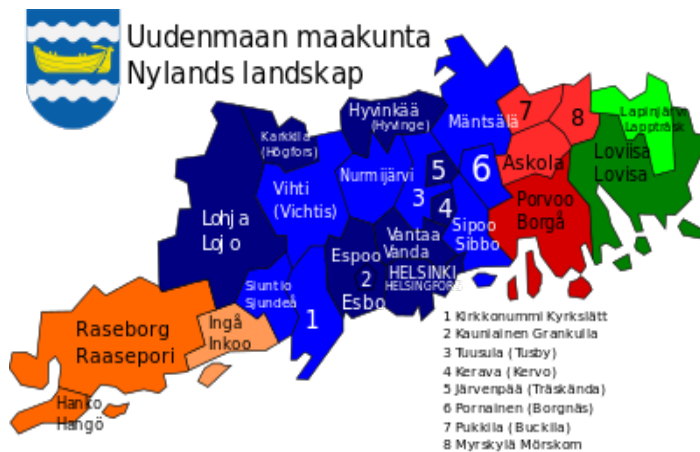


Figure 2 The Helsinki-Uusimaa region<sup>10</sup>

Since the 1st of January 2012, the metropolitan region of Helsinki-Uusimaa has been separated from the former Etelä-Suomi region at the NUTS2 level. Helsinki-Uusimaa has only one NUTS3

region with the same name. The metropolitan region consists of 26 municipalities, including the capital city, Helsinki. With only 3% of the national territory (9,568 km<sup>2</sup>), it is the most populated area in the whole of Finland with 1,671,024 inhabitants in 2019 (Eurostat, 2020). The area can also be described as the centre of economy, culture and competence in Finland. The metropolitan region is also the most international and urban area (in by 31 December 2019, 16.3% of population did not have either Finnish or Swedish as the native language, according to Statistics Finland), which is characterised by strong immigration and population density closer to the European average rates. In most of the municipalities there are two official languages: Finnish and Swedish, but some municipalities are monolingual in Finnish<sup>11</sup>.

### 3.2 Helsinki-Uusimaa 2021-2027 RIS3

The smart specialisation strategy for the Helsinki – Uusimaa region (HUR) was approved by the Regional Board on 27.4.2020. The implementation plan for the strategy was approved by the Regional Management Committee MYR on 3.2.2021. The current RIS3 strategy is valid for the time being. Based on the yearly

<sup>9</sup> All data is from: <https://ec.europa.eu/eurostat/documents/2995521/10474907/1-05032020-AP-EN.pdf/81807e19-e4c8-2e53-c98a-933f5bf30f58> .

<sup>10</sup> [https://en.wikipedia.org/wiki/Uusimaa#/media/File:Uusimaa\\_kunnat.svg](https://en.wikipedia.org/wiki/Uusimaa#/media/File:Uusimaa_kunnat.svg)

<sup>11</sup> <https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/base-profile/helsinki-uusimaa-region> .

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assessment, the Regional Management Committee (MYR) will propose necessary changes to the strategy or preparing a new smart specialisation strategy, if necessary.

In 2019, Helsinki-Uusimaa rose to the top of the European Union in the Regional Scoreboard 2019<sup>12</sup> comparing the innovation environments in European countries and regions. That was the highest Helsinki-Uusimaa was ever ranked, having been placed fifth in the previous year. The European Innovation Scoreboard 2020<sup>13</sup> ranks Finland 2<sup>nd</sup> in the overall classification of innovation performance and, also, in terms of Innovators (page 22). On the other hand, Finland is not doing as well in terms of Employment effects (page 24).

The overall aim of the HUR RIS3 is to effectively contribute to maintaining this position for the Helsinki – Uusimaa region and, addressing further specialisation and growth founded on regional strengths, contributing to edge research and industries, dealing with development issues through expertise and collaboration within, between, among and across regions. HUR recognises the importance of continuity and commitment and how the RIS3 is harnessed to attain growth in the regions' municipalities and communities.

The administrative decisions place emphasis on developing the competence, cooperation and synergy between different levels of governance. The innovation ecosystems are engines of sustainable growth. International cooperation is a key success factor.

The bet for the Helsinki – Uusimaa region is to maintain and consolidate its position at the forefront of innovation leader regions, through excellence and economic renewal initiatives and strengthening the manufacturing and export economy.

The driver of the HUR RIS3 is achieving change and future growth by focusing on efficient and effective and wise use of social, economic, and environmental resources.

The Helsinki-Uusimaa Region RIS3 builds around four goals<sup>14</sup>:

- (1) Sustainable economic growth: innovation based sustainable growth by a wise use of resources.
- (2) Industrial modernisation: utilising the opportunities created by new technologies to improve the competitiveness, growth potential and internationalisation of businesses.
- (3) A carbon neutral Helsinki- Uusimaa by 2035, carbon neutrality by 2035, a goal set in the Helsinki-Uusimaa Regional Programme 2.0.
- (4) Well-being in everyday life: constant improvement of services to citizens.

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<sup>12</sup> [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_19\\_2991](https://ec.europa.eu/commission/presscorner/detail/en/IP_19_2991)

<sup>13</sup> European Innovation Scoreboard 2020, <https://ec.europa.eu/docsroom/documents/42981>

<sup>14</sup> Page 10.

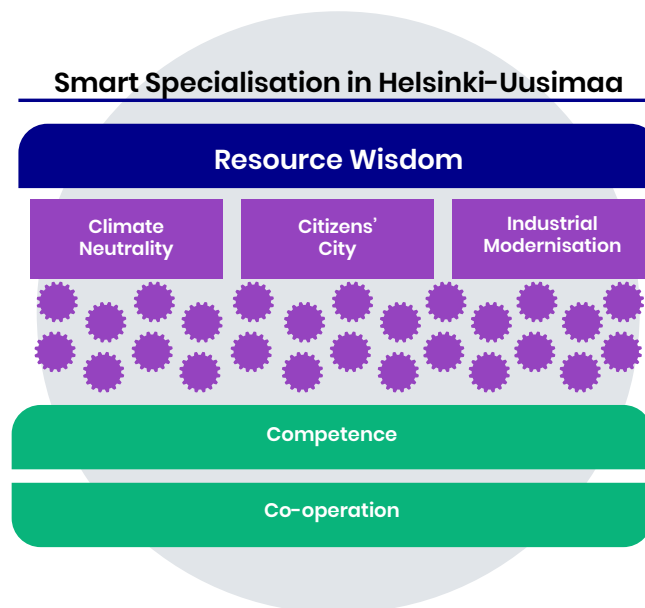


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These four goals are achieved by applying an integrated development approach, structured into three cross cutting Themes (Resource wisdom, Competence and Co-operation) and three vertical focus areas (Climate neutrality, Citizens' City, and Industrial Modernisation). The implementation approach takes into account:

- Helsinki-Uusimaa's strengths respond to current trends under the umbrella theme *resource wise Helsinki-Uusimaa*. The solutions require a cross-sectoral approach and defining the wise use of resources delineates the projects.
- A resource wise Helsinki-Uusimaa improves its ability to utilise existing resources and create growth through new resources (e.g. natural resources, raw materials, energy, products and services, workforce, information, competences, institutions and organisations) in a way that is considered and economically, socially and environmentally sustainable.
- Sustainable growth, that takes environmental, social, and economic factors into account, creates new opportunities for local actors.
- The development of digital applications and technology accelerates reaching the sustainable development goals.
- Resource wisdom gives a competitive advantage for Helsinki- Uusimaa internationally.

Figure 3 The concept of smart specialisation in Helsinki-Uusimaa RIS<sup>15</sup>



<sup>15</sup> Page 11.

## 4. Good practices

### 4.1 Good practice identification

According to the BRIDGES project additional activities, Good Practices (GPs) explore five (5) GP themes: (1) Tools for targeting value chain reshoring & nearshoring segments; (2) instruments for identifying interregional complementarities related to value chain re- and near- shoring priorities; (3) Targeted, VC related science-based entrepreneurship programmes and TRL<sup>16</sup> 5-8 promotion; (4) Integration of Green Deal & Digital Transformation into VC; (5) Benefitting from EDIHs.

The purpose of the good practice exercise is to identify good practices that can become policy tools for supporting re-, in- shoring and near-shoring initiatives of the partner areas, namely into the regional S3 of Helsinki-Uusimaa, Kainuu, (both FI) and Western Macedonia (GR); the CLLD of Western Slovenia (SI), and the national S3 of Western Transdanubia (HU)<sup>17</sup>. The exercise foresees near-shoring to be based on interregional complementarities mostly within the partnership, but it is not excluding more extensive collaboration schemes and networks.

The good practice identification took place between 1.10.2021 – 31.3.2022. It proved very challenging to identify good practices for all five themes. Finally, eleven (11) GPs were identified. Three come from BRIDGES project regions (2 come from Greece and 1 comes from Spain), 1 was identified during the Policy Learning matchmaking session organised by the PLP and the BRIDGES project on 30.3.2022, three from the USA, two are European Parliament initiatives, and two come from European Commission studies.


More than half of the good practices identified concern the 1<sup>st</sup> Theme (6 GPs), while the 2<sup>nd</sup> theme has two GPs, the 3<sup>rd</sup> theme 1 GP, and the 4<sup>th</sup> theme 2 GPs. No satisfactory GPs were identified for the 5<sup>th</sup> theme on

<sup>16</sup> **TRL = Technology readiness level = TRL= Technology Readiness Level.** Technology readiness levels (TRLs) are a method for estimating the maturity of technologies during the acquisition phase of a program, developed at NASA during the 1970s. The use of TRLs enables consistent, uniform discussions of technical maturity across different types of technology [Mihaly, Heder (September 2017). "From NASA to EU: the evolution of the TRL scale in Public Sector Innovation" (PDF). The Innovation Journal. 22: 1–23]. A technology's TRL is determined during a Technology Readiness Assessment (TRA) that examines program concepts, technology requirements, and demonstrated technology capabilities. The European Commission advised EU-funded research and innovation projects to adopt the scale in 2010. TRLs were consequently used in 2014 in the EU Horizon 2020. In 2013, the TRL scale was further canonised by the ISO 16290:2013 standard. "Technology readiness levels (TRL); Extract from Part 19 - Commission Decision C(2014)4995" (PDF). *ec.europa.eu*. 20149]. [https://en.wikipedia.org/wiki/Technology\\_readiness\\_level](https://en.wikipedia.org/wiki/Technology_readiness_level) . MORE:

<https://www.ic.gc.ca/eic/site/080.nsf/eng/00002.html>; [https://www.nasa.gov/directorates/heo/scan/engineering/technology/technology\\_readiness\\_level](https://www.nasa.gov/directorates/heo/scan/engineering/technology/technology_readiness_level) .

A comprehensive approach and discussion of TRLs has been published by the European Association of Research and Technology Organisations (EARTO) [The TRL Scale as a Research & Innovation Policy Tool, EARTO Recommendations (PDF). European Association of Research & Technology Organisations. 30 April 2014].

<sup>17</sup> Besides the BRIDGES project partners, the good practices contribute to the methodological tools of the BERRY+ S3

partnership (  <https://s3platform.jrc.ec.europa.eu/berry>), and to any region & their networks that are interested in institutionalising value chain-based policies and initiatives into their RIS3.

<http://www.interregeurope.eu/bridges/>

EDIH contributions to value chains. One of the challenges of the 5<sup>th</sup> thematic area, the EDIHs, is that often, there is a tendency to apply the term “digital innovation hub” or even “innovation hub” in a somewhat general way, often denoting a concentration of activities without specification of qualifications, functionalities, or results. Table 3 provides summary information the identified GPs according to their thematic domain and focus. Detailed descriptions of the GPs are included in the document *BRIDGES project, 5th call, additional activities: good practices*; <https://projects2014-2020.interregeurope.eu/bridges/library/>, while more information can be found also directly from the web, see cited [url:s](#) in Table 2.

Table 2 BRIDGES project additional activities, good practices (GP)

GP number and name	Theme	Focus
Good practice 1 The future of manufacturing in Europe (FOME) pilot project.	1	Pilot project of the European Parliament, 2015-2018. <a href="https://europa.eu/european-union/about-eu/agencies/eurofound_en">https://europa.eu/european-union/about-eu/agencies/eurofound_en</a> . Study investigating re-shoring industries, priorities, practices.
Good practice 2 Reshoring advanced manufacturing supply chains to generate good jobs (Brookings)	1	Brookings Metropolitan Policy Programme (2020). Reshoring advanced manufacturing supply chains to generate good jobs. July 2020. <a href="https://www.brookings.edu/interactives/metro-recovery-watch/">https://www.brookings.edu/interactives/metro-recovery-watch/</a> . Policy recommendations for re-shoring, 6 measures, fiscal, financial, and guaranteed contracting are proposed.
Good practice 3 Post Covid-19 value chains: options for reshoring production back to Europe in a globalised economy.	1	European Parliament (2021). Post Covid-19 value chains: options for reshoring production back to Europe in a globalised economy. European Parliament, Policy Department for External Relations Directorate General for External Policies of the Union PE 653.626 – March 2021. Near/off shoring and re-shoring decisions are required to be based on <i>multi-dimensional optimisation approaches</i> , while policies supporting re-shoring, should take into account the specific characteristics of the GVC under consideration, i.e., “no general policy approach to re-shoring exists”. Policy recommendations for re-shoring; reshoring decision framework.  ACCESS: <a href="https://www.europarl.europa.eu/thinktank/en/document/EXPO_STU(2021)653626">https://www.europarl.europa.eu/thinktank/en/document/EXPO_STU(2021)653626</a>  SECTORIAL: <a href="https://www.europarl.europa.eu/ReqData/etudes/STUD/2021/659437/EPRS_STU(2021)659437_EN.pdf">https://www.europarl.europa.eu/ReqData/etudes/STUD/2021/659437/EPRS_STU(2021)659437_EN.pdf</a>  OLDER: <a href="https://www.europarl.europa.eu/EPRS/140791REV1-Reshoring-of-EU-manufacturing-FINAL.pdf">https://www.europarl.europa.eu/EPRS/140791REV1-Reshoring-of-EU-manufacturing-FINAL.pdf</a>
Good practice 4 The use of 3D printing in manufacturing: the case of Inertia Racing Technology.	1	Reshoring Institute ( <a href="https://reshoringinstitute.org/">https://reshoringinstitute.org/</a> ), in collaboration with the University of San Diego Supply Chain Management Institute. Re-shoring case study. Gives ideas for business-based projects preparatory funding for re-defining business model in view of re-shoring interests.
Good practice 5 Increased innovation and service level in fashion: the case of Ted Shelton.	1	Reshoring Institute ( <a href="https://reshoringinstitute.org/">https://reshoringinstitute.org/</a> ), in collaboration with the University of San Diego Supply Chain Management Institute. Re-shoring case study. Gives ideas for business-based projects preparatory funding for re-defining the business model in view of re-shoring interests.
Good practice 6 BILAKATU programme (direct incentives to promote re-location and near-shoring; includes measures on direct incentives, collaboration with clusters and thriving companies needs)	1	Policy Learning Platform session, 30.3.2022 Policy initiative for re-location associated with value chains, three types of incentives / policy measures are proposed: direct incentives, collaboration with clusters, thriving companies needs (direct subsidies to strengthen embeddedness). <a href="https://www.spri.eus/es/ayudas/bilakatu/">https://www.spri.eus/es/ayudas/bilakatu/</a> <a href="https://www.fundacioncarmengandarias.com/contenidos.php?seccion=3&amp;categoria=14&amp;subcategoria=5&amp;lang=en">https://www.fundacioncarmengandarias.com/contenidos.php?seccion=3&amp;categoria=14&amp;subcategoria=5&amp;lang=en</a>

GP number and name	Theme	Focus
Good practice 7 Exploring the impact of interregional linkages on regional diversification in Europe, in the context of smart specialisation	2	European Commission, report by Baland & Boschma 2019 <a href="https://ec.europa.eu/regional_policy/sources/docgener/brochure/impact_ir_linkages_en.pdf">https://ec.europa.eu/regional_policy/sources/docgener/brochure/impact_ir_linkages_en.pdf</a>
Good practice 8 Mapping the potential of EU regions to contribute to Industry 4.0	2	European Union, Baland, P.A. and Boschma, R. (2021). Mapping the potentials of regions in Europe to contribute to new knowledge production in Industry 4.0 technologies. <i>Regional Studies</i> , 55:10-11, 1652-1666, DOI: 10.1080/00343404.2021.1900557
Good practice 9 DEFINE network	3	ePlatform for the development of fashion networks. <a href="https://www.define-network.eu/">https://www.define-network.eu/</a>
Good practice 10 Symbiotic networks of bio-waste sustainable management	4	<a href="https://symbiosisproject.eu/">https://symbiosisproject.eu/</a> Applying digital tools to develop symbiotic networks, to improve cross industry resource efficiency through waste, by-products and raw material trading and sharing assets in an environmentally sustainable way.
Good practice 11 SYMBIOICT	4	<a href="https://apps.symbiolabs.gr/symbio/">https://apps.symbiolabs.gr/symbio/</a> A digital platform to collect and analyse datasets relating to industrial facilities, regional waste production and supply chain economics with the aim to detect and visualize geographic areas and industrial sectors with high Industrial Symbiosis potential.  GP 11 has complementarities with GP 8.
Good practice 12 Value chain mapping methodology  For more information see <b>Table 5</b> <b>Reference source not found.</b>	1	GP12 is currently under evaluation by Interreg Europe Policy Learning Platform innovation experts. It is the instrument that has been used for the value chain mapping reports under the 5 <sup>th</sup> call additional activities.  The methodology focuses on identifying and exploring (0 building initiatives) for re-shoring, in-shoring and near-shoring value chain potential related to products and services, including access to markets. Competitive advantage is calculated according to different types of concentrations, sometimes absolute (like location quotient) and sometimes relative, reflecting potential of regional concentrations.  The methodology is aligned with GP2 and GP7. Its advantage is that it can reflect even baseline competitive advantage in regions and propose also better suited diversification strategies. At the same time, it is a tool that can build on interregionalities and on long term collaborations.

By analysing the eleven (11) GPs, we found thirteen (13) policy measures proposed by them. We notice that the same policy measures can be found in more than one GPs, for example GP 2 and 3, GP 7 and 8, GP 3 and 6, as indicated in Table 2 above and as discussed in Table 3 below. It implies that, in practical terms, there is convergence of understanding and optimisation approaches regarding value-chain based policies. In turn, this realisation simplifies considerably the 'paths' regions can adopt in order to benefit from value chains.

Table 3 Policy measures proposed by the identified good practices (GP12 is not included as it is currently under evaluation)

Proposed policy measures	Relevant GPs (*)										
	1	2	3	4	5	6	7	8	9	10	11
- Tools for the Identification of interregional complementarities							X	X			

Proposed policy measures	Relevant GPs (*)										
	1	2	3	4	5	6	7	8	9	10	11
- <b>Financial &amp; fiscal incentives</b> <sup>18</sup> Investment (subsidies) support, for example, for technological upgrading to Industry 4.0 / additive manufacturing, research centres and academic programmes for workforce upgrading; Interest rates, provisions oriented to facilitate re-shoring, i.e. a way of directing investments.	X		X			X					
- <b>Monetary policies, financial measures, subsidies.</b> Interest rates, provisions oriented to facilitate re-shoring, i.e. a way of directing investments.		X	X			X					
- <b>Innovation policies</b> Financial incentives for mission oriented, technological upgrading / investments, upskilling of workforce, research centres-university synergies.			X								
- <b>Industrial policies</b> Identification of grand challenges, missions, strategic sectors, industrial clusters, etc. to channel investment into strategic areas, Industrial clusters / smart spec.	X	X	X	X	X	X	(x)	(x)			
- <b>Trade policies</b> Anti-dumping / countervailing duty orders; Tariffs / quotas; Patent / copyright enforcement.	X		X								
- <b>Environment policies</b> Lower energy cost; Lower tax on energy use; Lower environmental standards.			X								
- <b>Public procurement</b> (including defence policies), including guaranteed contracting.		X	X	X	X			X			
- <b>Competitive advantage; crash test</b> Map most important industries locally and assess their performance ("crash test"); identify competitive advantage for re-shoring and in-shoring.	X	X	X	X	X	X	X	X			
- <b>Connect to and leverage regional talent generators and workforce development providers.</b> With the labour demand of many manufacturers shifting from low-skill, low-cost labour to mid- to high-skill engineering and technical capabilities, U.S. educational institutions are well positioned to	X	X		X	X	X					

<sup>18</sup> Financial, fiscal and monetary: **financial** (relating to finance, which is the commercial activity of providing funds and capital, or to put it the other way, the ways in which individuals and organizations raise money); **fiscal** (relating to financial matters, especially government tax revenues and government expenditure and debt); **monetary** (relating to the money supply: the amount of money in circulation, its rate of growth, and interest rates). <https://difference-between.com/finance/financial-fiscal-monetary/>.

Proposed policy measures	Relevant GPs (*)											
	1	2	3	4	5	6	7	8	9	10	11	
produce the very talent that will increasingly be in demand from these sectors. Connect to the need for a digitally fluent workforce, massive disruption is underway in manufacturing, with an increased reliance on technology as opposed to low-cost labour.												
- <b>Take advantage of Opportunity Zones</b> <a href="https://eig.org/opportunityzones">https://eig.org/opportunityzones</a>		X		X	X	X						
- <b>Invest in regionally based soft-landing services</b> Companies setting up new operations in any community will need assistance with site selection, permits and local approvals, and optimizing their processes.		X		X	X							
- <b>E-Platforms facilitating value chain cooperation</b>									X	X	X	
<b>LEGEND:</b> GP 1 FOME; GP 2 BROOKINGS; GP3 EPRS; gp4 & GP5 RESHORING INSTITUTE; GP 6 Basque Country; GP 7 & 8 identification of interregional complementarities as a tool to focus reshoring, in shoring and near-shoring initiatives; GP 9, 10, 11: e-platforms as tools supporting the implementation of thematic interregional complementarities.												

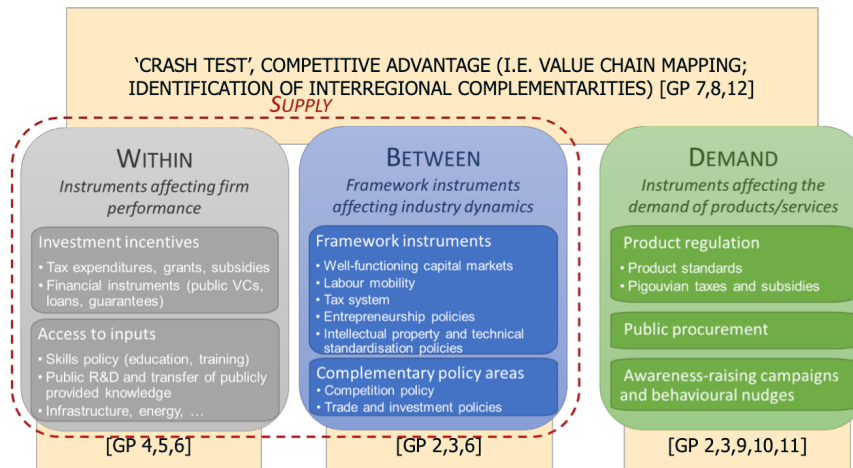
The proposed policy measures cover a wide range of interventions, some of which go beyond regional jurisdictions. They reveal a well-structured, multi-dimensional, optimisation approach that appears to rely on the complementarity between and among policy instruments. For example, instruments affecting firm performance, industrial dynamics and demand for products & services are all present among the 13 measures included in Table 3. It is worth mentioning that these 13 measures, appear to be aligned with the OECD taxonomy of policy instruments. The OECD (OECD 2022<sub>[1]</sub><sup>19</sup> and OECD 2022<sub>[2]</sub><sup>20</sup>, page 19) proposes a new taxonomy of industrial strategy policy instruments, which “allows identifying the channels through which instruments operate and potential complementarities”. ... In addition to keeping with the traditional distinction between horizontal and targeted policies, the taxonomy distinguishes between demand-pull instruments and two types of supply-push instruments: those that improve firm performance (“within” instruments) and those that affect industry dynamics (“between” or framework instruments) [OECD 2022<sub>[2]</sub>, page 19]. The 13 measures & the associated GPs go beyond the alignment with the OECD policy instrument taxonomy. They reveal an implementation path, an optimal re- and in-shoring potential decision making. In

<sup>19</sup> Criscuolo, C. et al. (2022), “Are industrial policy instruments effective? A review of the evidence in OECD countries”, *OECD Science, Technology and Industry Policy Papers*, No. 128, OECD Publishing, Paris. Accessed at <https://www.oecd-ilibrary.org/docserver/57b3dae2-en.pdf?expires=1656421972&id=id&accname=quest&checksum=15E3AF775AC84757C3AFF89F02F402CA>.

<sup>20</sup> Criscuolo, C., et al. (2022), “An industrial policy framework for OECD countries: Old debates, new perspectives”, *OECD Science, Technology and Industry Policy Papers*, No. 127, OECD Publishing, Paris, <https://doi.org/10.1787/0002217c-en>. Accessed at <https://www.oecd-ilibrary.org/docserver/0002217c-en.pdf?expires=1656418796&id=id&accname=quest&checksum=102441FCC1D46A6B1629CA71A29C0220>.

this path, the notion of the 'crash test', of competitive advantage' is predominant and it is this concept that is supported by the policies (Figure 3).

Figure 4 Policy instruments taxonomy and the BRIDGES project good practices (source: adjusted from OECD 2022<sup>[2]</sup>, page 19).



## 4.2 Good practice selection

Partners analysed the good practices and selected those that were most relevant to them. The selection process 1.4.2022 – 30.6.2022, included interregional, national (in some cases) and regional stakeholder as well as administrative meetings, with date marking the final decision making, the 17th ISC (Interregional Steering Committee), organised online on 14.6.2022. To make the good practice selection, GPs were analysed according to approaches (Table 2), measures (see the proposed thirteen (13) measures, Table 3) and types of policy improvement interventions as conceptualised by the Interreg EUROPE (IE) programme, Table 4.

Partner regions made their GP and measure selection according to their interests (development priorities and absorptive capacity). However, certain cross – cutting observations deserve more attention: (i) value chain mapping, as operational as well as strategic tool appears to be relevant for all partners; (ii) building on competitive advantage and associated (and localised) eco-system, is a shared priority among all partners; (iii) industry-related business and innovation services & collaboration with cluster units appear to be relevant to all partners as well; (iv) branch-related preparatory projects like feasibility studies and business plans for re-shoring have been important to two partners; (v) measures supporting competitive advantage of value chains (such as targeted development projects to large or medium size businesses, are also important to all regions; (vi) bilateral value chain mapping, for the establishment of interregional collaboration contexts and then implementing relevant activities. Table 4 maps also the good practice selection by PP4. PP4's good practice selection reflects the development rôle of PP4, strengthening the policy integration into the RIS3 as



<http://www.interregeurope.eu/bridges/>

an enabling condition, as innovation system actors (specialisation and collaboration of innovation intermediaries and clusters), and as re-industrialisation agents (business plans and feasibility plans for re-shoring and in-shoring, i.e. new models of business plans).

Table 4 Good practice selection, Helsinki-Uusimaa

<b>Type of policy impact (Type 1 = new projects; Type 2= improvement of the policy instrument management; Type 3= new policy instrument)</b>		<b>PP4</b>
Good practice 1 The Future of Manufacturing in Europe (FOME) pilot project.		
Good practice 2 Reshoring decision framework (Brookings)		
Type 2	Value chain mapping / competitive advantage for in-shoring and re-shoring	X
Type 2	Guaranteed contracting (requires negotiations with national level, too)	(X)
Good practice 3 Reshoring decision framework (EPRS)		
Type 2	Regionally based soft landing services (competence building and specialisation of intermediaries to effectively support re-shoring and in-shoring)	X
Good practice 4 The use of 3D printing in manufacturing: The case of Inertia Racing Technology		
Type 1	Branch-based feasibility studies helping businesses re-define their business concept to re-shoring. As preconditions for res-shoring business and research projects, for the sports equipment sector and stressing utilisation of 3D printing.	
Type 1	Business plans implementing primarily re-shoring and in-shoring business plans based on the respective feasibility studies; for the sports equipment sector and stressing utilisation of 3D printing.	
Good practice 5 Increased innovation and service level in fashion: The case of Todd Shelton		
Type 1	Branch-based feasibility studies helping businesses re-define their business concept to re-shoring. As preconditions for res-shoring business and research projects, for the textiles sector.	X
Type 1	Business plans implementing primarily re-shoring and in-shoring business plans based on the respective feasibility studies; for the textiles sector, and especially renewable and re-cyclable textiles.	X
Good practice 6 BILAKATU programme (direct incentives to promote re-location and near-shoring)		
Type 3	Direct incentives	
Type 1	Collaboration with clusters (this is aligned with GP3)	X
Type 2	Thriving companies' needs (this is aligned with GP2, option 1)	
Good practice 7 Exploring the impact of inter-regional linkages on regional diversification in Europe in the context of smart specialisation.		
Type 2	Network (at least 3) feasibility studies to identify complementary technologies for joint development; important for coordinated near-shoring with in-shoring	X
Good practice 8 Mapping the potential of EU regions to contribute to Industry 4.0		
Type 2	Network (at least 3) feasibility studies to identify complementary technologies for joint development	
Good practice 9 DEFINE network		
Type 1	e-Platform for the development of fashion networks.	
Good practice 10 Symbiotic networks of bio-waste sustainable management		
Type 1	Applying digital tools to develop symbiotic networks, to improve cross industry resource efficiency through waste, by-products and raw material trading and sharing assets in an environmentally sustainable way.	
Good practice 11 SYMBIOICT		
Type 1	A digital platform to collect and analyse datasets relating to industrial facilities, regional waste production and supply chain economics with the aim to detect and visualize geographic areas and industrial sectors with high Industrial Symbiosis potential.	



## 5. Value chain mapping

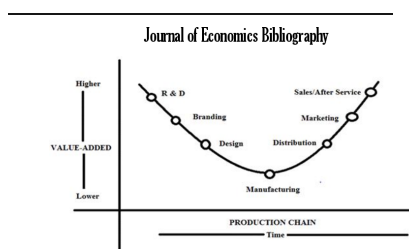
### 5.1 Value chain mapping methodology

The following value chains were selected to be mapped: forest industry side-streams (Kainuu, FI), recyclable and recyclable (Helsinki-Uusimaa, FI), dairy industry side-streams (Western Macedonia, GR and Western Slovenia, SI), and e-health equipment (Western Transdanubia).

The value chain mapping was done by applying a methodology devised by the BRIDGES project partners. The purpose is to map the selected value chains to identify localised strengths (peaks, competitive advantage), valleys (weaker points) as well as industrial and regional interactions within the same value chains. Value chains' competitive advantage is assessed according to five (5) parameters: business activities & products, research solutions (TRL 5+), knowledge and research (TRL 0-4), labour skills, and policies. These parameters were selected to mark regional concentrations reflecting the current 'VC smiling curve'<sup>21</sup> references, as listed in the horizontal axis in Table 1 below. Table 1, furthermore, proposes indicators for identifying value chain segments' competitive advantage. The relative advantage of this value chain mapping approach is that it can be tailored to all types of regions, innovation leaders or leaders + to innovation modest regions, according to the identified regional concentrations. This methodology has been conceived as a complementary approach to that introduced by GP7 (Balland & Boschma 2019) which identifies interregional linkages based on the technologies present in patents. To identify interregional complementarities, requires that two regions interested in the same value chain, are making in parallel the value chain mapping or, that thanks to known performance of the region and / or the RIS3 planning studies, such complementarities are indicated.

Table 5 Summary of the value chain mapping approach.

VC mapping parameters	Value chain mapping components and proxies.								
	Raw materials	Technologies / R&D	Design	Production	Products	Branding	Funding	Distribution	After sales service
Business	Turnover for the total of the sector		Turnover for the total of the sector	Turnover for the total of the sector	Range and added value of the sector	Projects funded of the sector as a whole		Range and turnover from sales	Turnover



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Figure 2. The Smile Curve  
Source: Midambiti (2008)

Aggarwal, S. (2017). Smile Curve and its linkages with Global Value Chains. Page 4; [https://mpr.ub.uni-muenchen.de/79324/1/MPRA\\_paper\\_79324.pdf](https://mpr.ub.uni-muenchen.de/79324/1/MPRA_paper_79324.pdf) .

VC mapping parameters	Value chain mapping components and proxies.								
	Raw materials	Technologies / R&D	Design	Production	Products	Branding	Funding	Distribution	After sales service
					as a whole				
						Visibility of sector across the EU.			
Research solutions		Funded projects for TRL or MRL scaling up		Funded projects for TRL or MRL scaling up					
		Results of projects TRL5+		Results of projects TRL5+					
Knowledge and research base		TRL0-4 projects; University faculties)	TRL0-4 projects; University faculties; targeted entrepreneurship	University faculties; targeted entrepreneurship		University faculties; targeted entrepreneurship			
			Average educational level in businesses and skills training in the region	Average educational level in businesses and skills training in the region	Average educational level in businesses and skills training in the region				Average educational level in businesses and skills training in the region
Policies (regional and national)	Funding schemes and policy measures	Funding schemes and policy measures	Funding schemes and policy measures	Funding schemes and policy measures	Funding schemes and policy measures	Funding schemes and policy measures	Funding schemes and policy measures	Funding schemes and policy measures	Funding schemes and policy measures
							Collaboration with financing organisations for possible alignment with financial instruments.		

The value chain mapping results are summarised in Table 6 below. The RIS3, the good practices selected and the value chain mapping form the base for the policy instrument improvement recommendations.

## 5.2 Value chain mapping results

Helsinki-Uusimaa prioritised the bio-based and recyclable textiles value chain. Bio-based and recyclable textiles form a strong research and innovation infrastructure pôle in Helsinki-Uusimaa, with a background of textile industry strengths in previous decades, followed by strong offshoring trends (labour costs). Bio-based and recyclable textiles are under the RIS3 priorities, especially the first three goals. The sector is aligned with the European Commission's Circular Economy Action Plan<sup>22</sup> (with special mention to Textiles and sustainability considerations, part 3.5<sup>23</sup>), the EU Industrial Strategy<sup>24</sup>, the EU New Industrial Strategy (with special focus on digital transformation and green transition)<sup>25</sup> and the Textiles Directive, strongly enabling innovation through sustainability in the textile sector<sup>26</sup>.

Table 6 value chain mapping summary, Helsinki-Uusimaa

VALUE CHAINS
<p><b>BIO-BASED AND RECYCLABLE TEXTILES<sup>27</sup></b>            Region: PP4 REGIONAL COUNCIL OF HELSINKI-UUSIMAA, HELSINKI – UUSIMAA</p> <p><b>Peaks (re-shoring and in-shoring potential)</b></p> <p>Regional reshoring is focused on high-end luxury products, highly valued brand products and high-quality technical textile products and additionally, different micro-factories who offer repair, and re-making services. This means micro-factories with sewing, printing small scale dyeing capabilities.</p> <p>Reshoring of cellulosic textile fibre spinning already started as Infinited Fiber Company announced plans to build its commercial-scale Infinna™ fiber factory.</p>
<p><b>Valleys (near-shoring and in more rare cases, in-shoring potential)</b></p>

<sup>22</sup> [https://ec.europa.eu/environment/pdf/circular-economy/new\\_circular\\_economy\\_action\\_plan.pdf](https://ec.europa.eu/environment/pdf/circular-economy/new_circular_economy_action_plan.pdf) .

<sup>23</sup> Ibid. above, page 13: "...-- applying the new sustainable product framework as set out in section 2 to textiles, including developing ecodesign measures to ensure that textile products are fit for circularity, ensuring the uptake of secondary raw materials, tackling the presence of hazardous chemicals, and empowering business and private consumers to choose sustainable textiles and have easy access to re- use and repair services; -- improving the business and regulatory environment for sustainable and circular textiles in the EU, in particular by providing incentives and support to product-as-service models, circular materials and production processes, and increasing transparency through international cooperation; -- providing guidance to achieve high levels of separate collection of textile waste, which Member States have to ensure by 2025; -- boosting the sorting, re-use and recycling of textiles, including through innovation, encouraging industrial applications and regulatory measures such as extended producer responsibility".

<sup>24</sup> EU Industrial Strategy [https://ec.europa.eu/growth/industry/strategy\\_en](https://ec.europa.eu/growth/industry/strategy_en) .

<sup>25</sup> COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS A New Industrial Strategy for Europe. COM/2020/102 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1593086905382&uri=CELEX:52020DC0102>. Press release: [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_416](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_416) .

<sup>26</sup> Regulation (EU) No 1007/2011 of the European Parliament and of the Council of 27 September 2011 on textile fibre names and related labelling and marking of the fibre composition of textile products and repealing Council Directive 73/44/EEC and Directives 96/73/EC and 2008/121/EC of the European Parliament and of the Council Text with EEA relevance. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011R1007&from=EN> .

<sup>27</sup> **TAINA'S REPORT**

**VALUE CHAINS**

No in-shoring potential – unless digital transformation is systematically introduced, in mass production of the labour-intensive production steps, such as yarn spinning, weaving of fabrics, dyeing and finishing of fabrics.

Near-shoring potential in textile assembly (e.g., sewing and assembly of the final product) that has already started. Near-shoring potential in labour intensive production steps but finding and matchmaking of right partnerships has delayed this.

Two conclusions follow from the suggestions above: (i) that it is important and relevant to apply interregional complementarity tools with indicated. EU regions and (ii) projects to automate labour intensive stages should be made asas.

**Interregionality (near shoring)**

In textile recycling value chain, South-West Finland region are logical partner region. For the wood based cellulosic textile fibres, logical partner-regions in Finland are those where pulps mills are situated.

Near-shoring potential has been identified in the Baltics, Sweden and Denmark, as well as Italy (Friuli Venezia Giulia, cellulose and specialisation alignment), France (textile, garment and research market) and Portugal (Centro and Norte, textile production and cellulose; also textile-specialised innovation intermediaries). It follows that Interregionality assessments should take into account these areas, and it can be done also multilaterally. Turkey and Morocco are relevant countries to nearshoring textile production (very low labour costs) so far as labour intensive stages are concerned. On the other hand, given transport costs, these destinations appear less plausible. Logical near shoring countries are Baltic countries when considering especially textile assembly. For textile recycling Nordic countries, especially Sweden and Denmark are desired.

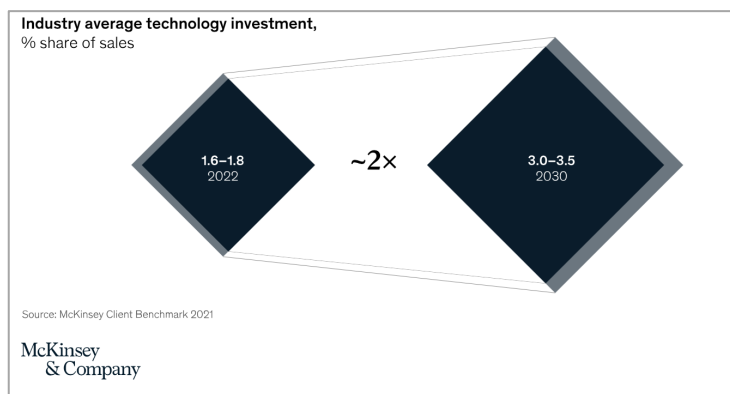
## 6. Policy instrument improvement recommendations

The policy instrument improvement recommendations are the result of 'merging' three sources of information: the good practices selected, the value chain mapping, and the RIS3 priorities.

The value chain mapping in Helsinki-Uusimaa proves a valuable instrument of economic renewal: it diversifies the specialisation base to respond to an updated context, and this context reflects most recent findings regarding trends in the textiles industry. More specifically, the policy instrument improvement recommendations aim at integrating:

- above all, the demand – based approach (overarching policies and strategies, RIS3 [(1) Sustainable economic growth: innovation based sustainable growth by a wise use of resources; (2) Industrial modernisation: utilising the opportunities created by new technologies to improve the competitiveness, growth potential and internationalisation of businesses; (3) A carbon neutral Helsinki- Uusimaa by 2035, carbon neutrality by 2035, a goal set in the Helsinki-Uusimaa Regional Programme 2.0; and all four cross-cutting themes])
- international market trends<sup>28</sup> regarding technology investments in textile and fashion industry (McKinsey 12.7.2022<sup>29</sup>) and Figure 5 below. Fashion-relevant technology domains, according to this report, are: (1) *Hyperpersonalisation*. Brands have access to a growing arsenal of personalization tools and technologies to upgrade how they customize and personalize their customer relationships. (2) *Connected stores*. The inexorable rise of e-commerce. (3) *End-to-end upgrade*. Digital tools and analytics applied within one business and across value chains, freeing the potential of cross-functional improvements. Brands should embark on end-to-end value chain integration to create more efficient and more profitable ways of operating. (4) *Traceability first*. Traceability systems powered by traceability software and big data will help fashion brands reach far into their supply chains to understand the entire life cycle of their products, a key enabler for sustainability road maps.

Figure 5 Fashion companies are expected to double investments in technology



<sup>28</sup> <https://www.mckinsey.com/featured-insights/coronavirus-leading-through-the-crisis/charting-the-path-to-the-next-normal/fashion-doubles-down-on-tech> .

<sup>29</sup> McKinsey (2022). State of fashion technology report 2022. May 2, 2022. Fashion companies believe technology could create a competitive edge. Over the next decade, the industry average technology investment is expected to double, from between 1.6 and 1.8 percent of revenues in 2022 to between 3.0 and 3.5 percent in 2030. <https://www.mckinsey.com/featured-insights/coronavirus-leading-through-the-crisis/charting-the-path-to-the-next-normal/fashion-doubles-down-on-tech> .

<http://www.interregeurope.eu/bridges/>

- the supply side potential (as prior productive base and as current research, innovation and knowledge base)
- national resource relevance,
- critical mass challenges of the consumer market,
- project partner networks,
- as well as the current conjecture calling for re-shoring and near shoring rather than off shoring.

The policy instrument improvement recommendations (Table 7) aim at exploring the value chain mapping results (Table 6) and the good practice – based solutions and initiatives included within the GPs (Table 3). The proposed policy instrument improvement recommendations by PP4 prioritise methodologies for value chain mapping, for identification of interregional complementarities, re-shoring and in-shoring initiatives related to the bio-based and recyclable textiles sector. Moreover, almost all of the recommended policy instrument improvements are also aligned with the EC’s New Innovation Agenda <sup>30</sup> priorities, for example ‘Accelerating and strengthening innovation in European Innovation Ecosystems across the EU; improving policy making tools’ and others.

Table 7 Good practices and policy instrument improvement, Helsinki-Uusimaa

Policy instrument interventions	Policy instrument update stage	GP reference	Implementation
1.-Mainstreaming value-chain based development into the RIS3.	During the RIS3 update process. Topic is included in the text.	It is mentioned that the RIS3 update takes into account evidence-based, value-chain based development.	<b>VALUE CHAINS AS PARTS OF THE RIS3 IMPLEMENTATION ENABLERS</b> The idea included into the updated RIS3. Regional and national projects strengthening the value-chain based evidence of RIS3 industries. As a precondition for investment initiatives and development projects. It is investing targeted actions in in-shoring, re-shoring and near-shoring.  Internal meeting should decide the explicit mentioning of value-chain based development in the updated RIS3.
<b>MAINSTREAMING</b>			
The same reference as in the ‘Policy instrument update stage’ above.			
<b>BENEFIT</b>			
It reinforces the legitimacy of the value-chain based approach in the region and the strategy for targeted interventions.			
2.-Measures to identify interregional & national technological & eco-system complementarities	<b>DATA IDENTIFICATION:</b> When necessary, such identification can be done and it can feed into the update of the RIS3. This will help us to form a concept of targeted actions so that networks	We apply Good Practice (GP) 7 Exploring the impact of inter-regional linkages on regional diversification in Europe in the context of smart specialisation.	<b>INTERREGIONAL COMPLEMENTARITY REPORT</b> Based on prioritised RIS3 domains, and in this case the ‘Bio-based and recyclable textiles’ the terms of reference are formulated and reinforced with criteria for eco-system

<sup>30</sup> [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_22\\_4273](https://ec.europa.eu/commission/presscorner/detail/en/IP_22_4273) .

Policy instrument interventions	Policy instrument update stage	GP reference	Implementation
	<p>can be even more important in economic growth.</p> <p>MAINSTREAMING: Following the interregional report and approval of the findings for mainstreaming, see item MAINSTREAMING below.</p>	GP is by Balland and Boschma, study assigned in 2019 by the EC.	<p>complementarities (includes innovation intermediaries).</p> <p>Funding for external project is looked for.</p> <p>It requires that similar project is carried out by selected regions in existing networks.</p> <p>Funding for this must come from national or regional resources.</p>
<p><b>MAINSTREAMING</b></p> <p>Among the main findings of the value chain mapping report (VTT 2022<sup>31</sup>) realised in the context of the BRIDGES project, is that bio-based and recyclable textiles, in the current state of affairs within the EU and further, are an industrial development opportunity. There is potential for inshoring (= development of new research and production activities), and the textile offshored activities can be repatriated in terms of bio-based and recyclable textiles. The factors advocating textile industry repatriation are close and controllable access to raw materials, access to research and research infrastructures, reduced transport costs, and digital transformation solutions.</p> <p>Near shoring is very important, and in that sense the Baltic countries, Sweden and Denmark are priority partners, and interregional complementarities could start from this group. Interregional complementarity findings in terms of technological, research, and innovation intermediary potential are included into the priority domains of the revised RIS3.</p> <p>Near-shoring potential has been identified in the Baltics, Sweden and Denmark, as well as Italy (Friuli Venezia Giulia, cellulose and specialisation alignment), France (textile, garment and research market) and Portugal (Centro and Norte, textile production and cellulose; also textile-specialised innovation intermediaries). It follows that Interregionality assessments should take into account these areas, and it can be done also multilaterally.</p>			
<p><b>BENEFIT</b></p> <p>Long term collaboration between research and innovation systems; identified complementarities can be institutionalised through MoUs establishing technological collaborative paths when relevant. We identify, within existing networks, complementary technologies related to the HUR RIS3 themes -and in this case the bio-based and recyclable textiles. This identification allows us to see the technologies that are suitable for joint development or even for near-shoring outside HUR, and how they connect to what we continue to develop locally. It leads us to consider focusing on new generation of projects and of investment measures. This new generation of possible initiatives can be included into the criteria of calls of the updated RIS3.</p> <p>Suggestion: in the example given by Balland and Boschma, hydrogen sector is considered. Helsinki-Uusimaa has a lot of potential with Île de France. Similar approach can be adopted for the bio-based and recyclable textiles value chain.</p>			
<p>3.- Value chain mapping to identify competitive advantage in products and services, including near shoring options.</p>	<p>During the RIS3 update and as part of its implementation.</p>	<p>The competitive advantage approach is supported by GP2. It is also aligned with the methodology developed through the BRIDGES project, during the implementation of the additional activities, 2021-22. It is called, for short, GP12, and it is described here: Table 5 Summary of the value chain mapping approach.</p>	<p><b>VALUE CHAIN MAPPING REPORT</b></p> <p>As in the previous case, an external open call is required, the funding can come from the SF and other regional or national funds. In this case, it is not an absolute necessity to have more than one regions involved (however it is recommended).</p>
<p><b>MAINSTREAMING</b></p> <p>The Value chain mapping report reveals re-shoring and in-shoring potential and domains for further targeted actions. As discussed under item (2) in-shoring is especially possible as the bio-based and recyclable textile industry is developing now, however re-shoring initiatives can be about value chain segments, currently operating in non-EU territory. In the process, the business model will need to be re-defined.</p> <p>One important potential of item (3) is to include market access across the EU, in countries with traditional interest and competence in the textile industry.</p>			
<p><b>BENEFIT</b></p> <p>Long term collaboration between and among productive systems; possibilities to develop interactions for market placement of innovative products; tools to develop re-shoring and in-shoring strategies and criteria for near shoring collaborations.</p>			

<sup>31</sup> **TAINA'S REPORT**

Policy instrument interventions	Policy instrument update stage	GP reference	Implementation
4.1- Measures to support re-shoring, in-shoring and near-shoring in specific value chains & related segments.	<p>The topic is mentioned in the updated RIS3.</p> <p>It is implemented when the implementation of the updated RIS3 is due.</p>	<p>The concrete possible measures come from GPs 4 and 5.</p> <p>It is noted that the solutions proposed in the GPs sometimes involve high level (beyond SF) decision making. Nevertheless, it is strongly recommended to take up the discussion and select relevant measures.</p>	<p><b>Business support projects to re-define business model in view of re-shoring or in-shoring.</b></p> <p>Usually this means going away from cheaper labour and strengthening returns from other crucial business model aspects.</p> <p>Based on the findings of the VTT report, business model will need to optimise Finnish labour costs, with automation, access to knowledge and research, access to raw materials, access to decreased transport costs, reduced supply chain risks, and access to design expertise.</p> <p>It is recommended that interdisciplinary projects, bringing together bio-based &amp; recyclable textiles with textile and garments design are strongly recommended.</p> <p>Examples of possible types of projects <sup>32</sup>: Telavalue project (Business Finland funded), Future of non-wovens, New Cotton project.</p>
4.2-Measures to improve the regional ecosystem related to specific segments of selected value chains.	<p>The topic is mentioned in the updated RIS3.</p> <p>It is implemented when the implementation of the updated RIS3 is due.</p>	<p>Related GPs are GP2 (soft landing services) and 6 (collaboration with clusters)</p>	<p>There are two aspects here: (i) capacity building and improvement of innovation intermediaries, and (ii) collaborations between and among qualified innovation intermediaries.</p>
<b>MAINSTREAMING</b>			
Options for Business support projects to re-define business model and for projects Strengthening the effectiveness and specialisation of innovation intermediaries to be included into the revised RIS3.			
<b>BENEFIT</b>			
4.1 Re-shoring & in-shoring tools resulting in densification of localised value chains; re-industrialisation.			
4.2 Industry-based specialised & qualified intermediary services, to support as effectively as possible value chains prioritised by the region's RIS3. This activity is aligned with the New Innovation Agenda ( <a href="https://ec.europa.eu/commission/presscorner/detail/en/IP_22_4273">https://ec.europa.eu/commission/presscorner/detail/en/IP_22_4273</a> ).			
Focus is on capacity building, qualification and certification, making use of regional and national funds, as well as Interreg and other EU programme options such as the I3 programme (I3 calls, Strand 2a and 2b. Such projects should be among the regions that have participated in the identification of complementarities and then the focusing of joint and/ or complementary actions, i.e. regions that participated in the complementarity exercise discussed in items (2) and (3) of Table 7). Collaboration options will also include EOSC (European Open Science Cloud, <a href="https://eosc-portal.eu/">https://eosc-portal.eu/</a> ) when large research infrastructures (such as VTT) are included.			
During the initial period, initiatives will focus on bio-based and recyclable textiles, including digital and green transition.			

<sup>32</sup> Examples of relevant projects (for inspiration): *Telavalue*: Value Chains for Sustainable Production, Use and Cycling of Textiles funded by Business Finland, aim is to support and build value chains for sustainable production, use and cycles of textiles. In the project the aim is to combine recycled and novel bio-based fibers as basis for sustainable Finnish textile production. Ongoing project. *Future of Nonwovens*: Development of air-laid nonwovens from bio-based and recycled fibers to obtain web that answers the SUP-directive challenges. Funded by BF. Ongoing project. *New Cotton Project*: chemical recycling of cotton and cellulosic materials for circular fashion. Funded by EU. Ongoing project.



## 7. Conclusions: benefits from the additional activities

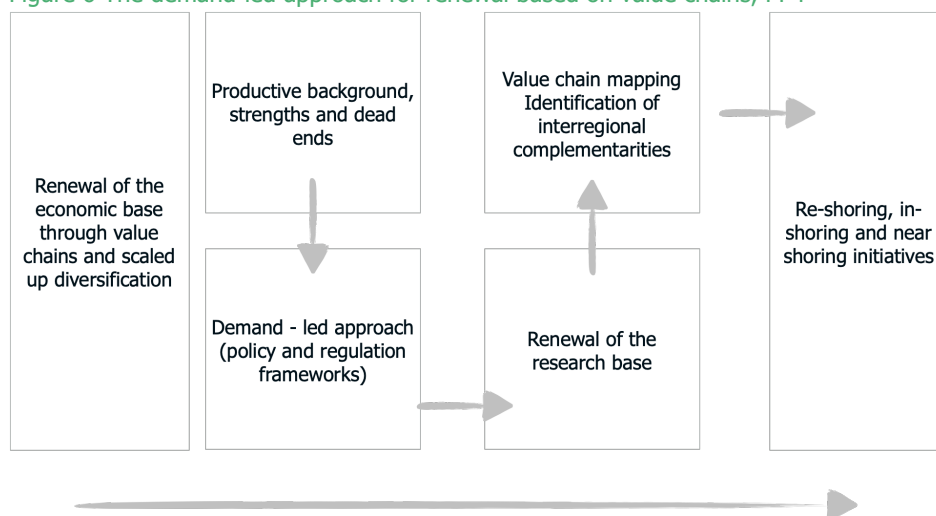
The objective of the additional activities, for PP4, was to identify those segments of the bio-based and recyclable textiles value chain that could lead to re-shoring, in-shoring and near-shoring, aiming at the industrial renewal of the sector. This has been a demand-led (EC strategies and textile directives), knowledge-driven approach. In this case, the key competitive advantage of PP4 has been and is, the localisation of strong, relevant research institutions, state of the art productisation processes, and skills availability. For many years, Finland had been losing the textiles industry due to labour costs.

The experience of the additional activities confirmed the potential for re-industrialisation. It relies, according to the value chain mapping findings, on mobilising the localised science and skills resources into re-shoring and in-shoring of production units, organising further a national level system supporting bio-based and recyclable textiles, benefitting from interregional networks for joint development of related technologies and applications as well as ensuring access to markets. In the case of Helsinki-Uusimaa, this implies the possibility of activating and adding value to already existing networks for targeted collaboration. As a region, Helsinki-Uusimaa will need to optimise and invest accordingly in several issues:

- re-shoring and in-shoring, optimisation of business models moving away from the traditionally overarching priority of labour costs reduction to maximising product diversification and quality, and the 0-costs access to advanced research. This cannot be done without the digital transformation of the sector, i.e. the new business models must be both about new product development implemented in digitally transformed environments;
- secondly, systemic re-organisation for optimizing the supply – side of bio-based and recyclable textiles as they involve, in terms of raw materials inputs forest side-streams as well as textiles to be recycled.
- strategic partnerships for joint development of technologies.
- systematic effort of branding and reaching (or maybe co-creating) new markets.

Finally, one important insight relates to the potential of the region to address the demand-led approach (especially directives and regulations) approach as an economic renewal opportunity rather than as a compliance driver, as a result of its strong and relevant research base. This insight is mapped in Figure 6.

Figure 6 The demand-led approach for renewal based on value chains, PP4



## 8. Contributions

Regional Council of Helsinki-Uusimaa (Ari Laineuvo, Venla Virkämäki), VTT, (Taina Kumpuri); in collaboration with Ninetta Chaniotou, PP2/LP.

Regional stakeholder group meetings

<b>Bio-based and recyclable textiles (PP4)</b>
<b>Date</b>
<b>Issues</b>
<b>Participants</b>
<b>Results</b>