The Green Deal and Smart Specialisation

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Version 3 final, 18 February 2020¹

This paper has been produced by the 'Friends of Smart Specialisation'² and is intended to be a 'rolling document' that encourages and stimulates dialogue on what will be a key issue for Europe over the next decades. Comments are therefore welcome.³ This paper will be updated following any comments received, discussions with a variety of stakeholders, and the analysis of the strategies promised in the Green Deal Communication such as the revised EU Industrial Strategy.

EXECUTIVE SUMMARY

The European Green Deal is the **new growth strategy for the EU.**⁴ The Communication introducing the Green Deal admits that this unprecedented transformation will 'require a strong policy response at all levels' and significant investment efforts. However, the Communication says little on how the strategy will be delivered at the local and regional level and does not refer to smart specialisation strategies as a possible delivery channel. This paper argues that a successful implementation of the Green Deal can only be achieved with a smart governance mechanism. Smart Specialisation has been introduced as a new policy approach for targeted investments prioritising new directions in the economy for more than 10 years.⁵ Therefore, it is arguable that the European Green Deal can ill afford to ignore the demonstrated potential of smart specialisation to mobilise place-based innovation efforts for transformation goals.

Faced with the unprecedented challenge of system change to become a climate-neutral continent and the huge investments this requires the Green Deal Communication has called upon all policies to contribute and has given direction to investments in a broad range of areas. Smart Specialisation strategies that prioritise new growth opportunities for all regions in these domains cannot be neglected in such an approach. However, to step up this role in the Green Deal, the smart specialisation approach has to move-on towards its core mission: the alignment of strategic investments across Europe guided by 'smart complementarities' in new value chains.

A policy approach for alignment

A systemic challenge such as the Green Deal needs the mobilisation of all resources, all actors all over Europe. Smart specialisation has exactly this mission: identify new future activities based on the unique characteristics of all places. The transformation of the growth model is a transformation of the specialisation structure of our economies. To avoid fragmentation and capitalise on the diversity of European innovation

¹ The authors thank Thomas Wobben and his colleagues in the Committee of Regions for their constructive remarks on an earlier version of this paper. However, the opinions expressed are those of the authors.

² An initiative from an independent group of experts and practitioners concerned for the future directions of smart specialisation. The group's goal is to support the mainstreaming of Smart Specialisation as an instrument for strengthening the multi-level European innovation system. For more information see <u>http://www.efiscentre.eu/portfolio-item/friends-of-smart-specialisation</u>

³ See Annex 2 for contact addresses for comments and further information.

⁴ COM(2019) 640 final, Brussels, 11.12.2019

⁵ 'Smart specialisation strategies can ensure a more effective use of public funds and can stimulate private investment. They can help regions to concentrate resources on few key priorities rather than spreading investment thinly across areas and business sector...' Regional Policy contributing to smart growth in Europe 2020 COM(2010)553 final 6 October 2010.

eco-systems, smart specialisation is a key delivery mechanism for the new growth strategy. It can combine the directionality of the European Green Deal roadmap with the search and co-creation path (entrepreneurial discovery) towards sustainable growth in all regions. Interregional partnerships will also play a key role in leveraging the alignment of place-based strengths.

A governance model, both for bottom-up co-creation and for European coordination

The Green Deal requires new strategic governance capacity for transformation: a European model distinct from the dominance of monopolies or state bureaucracy. The failure of the Lisbon Strategy to guide the transition to a leading knowledge economy, and the recognition of how smart specialisation emerged in this context, needs to be taken into account when discussing the successful governance mechanism of the Green Deal. The European Semester can be used for macro-economic coordination, but for coordination at micro- or meso-economic level (strategic value chains) the role of smart specialisation strategies cannot be underestimated. We are moving a long way from the 'Open Method of Coordination' to a governance of a more integrated European innovation system. The role of political leadership at all levels (in particular regions and cities) to give directionality to the efforts of European citizens in places where they live, work and invest, is a key factor for success.

A truly co-investment endeavour

The huge investment efforts for green transformation starts by the capacity to shift existing budgets in new directions that are identified as promising for the future. But strategic prioritisation in times of radical change can only work when all budgets move in the same direction (given well informed analysis and evidence-based decision processes) and when smart specialisation becomes 'smart complementarity' achieving common goals. The commitment for co-investment across borders in joint demonstration of solutions and in complementary nodes of new value chains has an entrepreneurial dimension and needs political guidance, but the financing system should evolve in the same direction. Therefore, the new taxonomy to facilitate sustainable investment should recognise the spill-over potential of co-investment as benefit, instead of evaluating projects separately.

The Green Deal and smart specialisation are both transformation policy frameworks. Where smart specialisation is in search of directionality, the Green Deal can benefit from place-based dynamics. This combination benefits a federative European approach to transformation. Therefore, the policy framework of the Green Deal must take smart specialisation explicitly on board.

INTRODUCTION

The European Green Deal⁶ is the new growth strategy for the EU which aims to

transform (the EU) into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use.⁷

The Communication introducing the Green Deal admits that this unprecedented transformation will 'require a strong policy response at all levels' and significant investment efforts. However, the Communication says little on how the strategy will be delivered at the local and regional level. In particular, the Communication omits any reference to smart specialisation as such a delivery mechanism. This paper argues that a successful implementation of the Green Deal can only be achieved with a smart governance mechanism. Smart Specialisation has been introduced as a new policy approach for targeted investments prioritising new directions in the economy for more than 10 years.⁸ Therefore, it has the potential to contribute to the aims of the Green Deal.

Smart specialisation is part of the emerging paradigm shift in the European economic policy in the present multi-polarisation of the world economy. The EU can and should use the strengths of its internal market for setting the standards of a new economy to deliver on the 21st century needs of people and climate. This means that the EU must further design its unique coordination mechanisms for new value chains. Smart specialisation is a distinctly European collaborative approach to combine efforts for common challenges, because it capitalises on its diversity with what we would call here 'smart complementarities' (pointing to complementary strengths of dynamic comparative advantage).

The policy framework for the Green Deal is now in development. The Green Deal represents a new form of mission-oriented policy making with a role for a more entrepreneurial state.⁹ But this stronger role of the state (at all levels of government) requires an inclusive entrepreneurial discovery process to make the right policy choices. Such an ambitious new strategy will also need an ambitious policy and governance framework. Significant beginnings of such a framework exist through smart specialisation strategies which have involved all regions and countries in Europe. What is needed now is a strategic discussion on **the evolving role of smart specialisation, from a cohesion policy instrument to an overall governance tool for European transformation**. Taking the ambition to become a global leader for climate-driven growth seriously, Europe can learn from the successes and failures of past ambitious reform efforts such as the Lisbon and Europe 2020 Strategies and from policy experimentation within smart specialisation. This means that smart specialisation is a close ally of the Green Deal, as a policy approach and governance mechanism that integrates the need for directionality with bottom-up entrepreneurship and co-creation of new sustainable growth opportunities. It is a key component for Green Deal success.

⁶ COM(2019) 640 final, Brussels, 11.12.2019

⁷ COM(2019) 640 final, Brussels, 11.12.2019

⁸ 'Smart specialisation strategies can ensure a more effective use of public funds and can stimulate private investment. They can help regions to concentrate resources on few key priorities rather than spreading investment thinly across areas and business sector...' Regional Policy contributing to smart growth in Europe 2020 COM(2010)553 final 6 October 2010.

⁹ See <u>https://marianamazzucato.com/entrepreneurial-state/</u>

WHY AND HOW SMART SPECIALISATION EMERGED

Fragmented policy frameworks and fragmented investment efforts are the main barriers for structural change in the EU.¹⁰ This is particularly true now that fiscal policy is back on the agenda. The EU has only a limited budget and even in key-domains such as research and innovation, the resources of national and regional authorities by far exceed those of the EU and other supra-national European bodies.¹¹

That is why smart specialisation (S3) was developed in 2007 as a European research and innovation policy approach in the context of the European Research Area (ERA)¹²and the 3% R&D objective.¹³ In the work coordinated by the Directorate of the ERA in the European Commission's Directorate General for Research and Innovation (DG RTD) the rationale for 'specialisation' intending to enhance the efficient and effective use of financial resources for national public R&D expenditure was clear. First, for more efficiency, by avoiding unnecessary duplication and fragmentation. Second, for being more effective, by prioritising knowledge investments in directions that are based on areas of comparative advantage. The term 'smart specialisation' was coined by a high level expert group, the Expert Group on Knowledge for Growth for specific reasons: because of the key role of ICT¹⁴ in the upgrading the European economies; because of differentiation of research and innovation investments in the different agglomerations (clusters) in the European economies; and because of the role of 'entrepreneurial discovery' in this place-based process of prioritising public R&D investments for competitive advantages in future growth areas.¹⁵

How to deliver such a targeted coordination of public R&I investments? The ERA is intended to achieve a better balance among national public expenditures for R&D while also increasing their level in search of the 3% R&D target.¹⁶ However the ERA as a concept does not involve any financial redistribution mechanisms (unlike the European Structural and Investment Funds). The ERA concept intended to create a real internal market for research, science and innovation and a continuous improvement of national and regional research and innovation systems through the so-called 'Open Method of Coordination '(OMC) – a form of intergovernmental policy-making involving open benchmarking and learning from the 'best-in-class' that does not result in binding EU legislative measures and it does not require EU countries to introduce or amend their laws. The 'shared management' used in the case of Structural Funds leaves a bigger role for orienting the use of the European funds in the Member States.

On 6th October 2010, two Policy Communications were edited in coordination by two different Commission departments, DG Research and Innovation (DG RTD) and DG Regional and Urban Policy (DG REGIO). The 'Innovation Union Flagship'¹⁷ identified the challenge of fragmentation and the role of societal challenges as

¹⁰ A joint OECD and Committee of the Regions survey (2015) indicated that governance problems are as relevant as gaps in financing. The fall in investment is due to a fall in public funding. It is also the result of a lack of coordination among national, regional and local governments in planning and funding infrastructure projects which is holding up delivery by private contractors. We need to significantly improve collaboration among governments, the private sector and universities to deliver results and stir innovation in the sector. See http://portal.cor.europa.eu/europe2020/news/Pages/oecd-joint-eport.aspx

¹¹ 'National budgets will play a key role in the transition redirecting public investment, consumption and taxes towards green priorities. A review of European economic governance will include a reference to green public investment and inform the debate on how to improve European fiscal governance.' COM(2019) 640 final, Brussels, 11.12.2019

¹² See <u>https://ec.europa.eu/info/research-and-innovation/strategy/era_en</u>

¹⁴ Information and Communication Technologies

¹³ After a period of slow but rising growth, gross domestic expenditure on R&D as a percentage of GDP ('R&D intensity') in the EU stagnated at around 2.06 % between 2014 and 2017. As a result, the 3 % Europe 2020 target is still some distance away. See <u>https://ec.europa.eu/eurostat/statistics-explained/index.php/Europe_2020_indicators_-_R%26D_and_innovation</u> 3%

¹⁵ The Knowledge for Growth expert group (Group), called into existence by European Commissioner J. Potočnik in March 2005, was tasked to provide advice and insight about the problems and issues that would promote the emergence and development of an efficient and effective European system of research and innovation. One early paper outlines smart specialisation.

https://ec.europa.eu/research/innovation-union/pdf/expert-groups/i4g-reports/i4g_policy_brief_8__smart_specialisation.pdf ¹⁶ The Lisbon Treaty of 2009 reinforced the legal base for European R&I policy by including the ERA as an objective (art 182)

¹⁷ <u>https://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication_en.pdf</u> Europe 2020 Flagship Initiative Innovation Union'. Smart specialisation is considered as part of national innovation policy.

driver of joint research and innovation efforts,¹⁸ and at the same time smart specialisation was proposed as a general characteristic for modernising the research and innovation strategies (see annex 2¹⁹). In the Communication 'Regional Policy Contributing to Smart Growth in Europe'²⁰ research and innovation strategies for smart specialisation' (RIS3) were put forward as an ex-ante conditionality²¹ for accessing resources from the European Regional Development Fund (ERDF) for research and innovation investments, thereby striving for a better use of these funds.

The 2012 Communication 'A Reinforced European Research Area Partnership for Excellence and Growth' stated:

It is vital that Member States and regions build up their own research systems, based on their own strengths, in line with smart specialisation. However, to achieve a globally competitive ERA for Europe to play a leading role in addressing grand challenges and in which all Member States participate, national systems must be more open to each other and to the world, more inter-connected and more inter-operable.²²

But what happened afterwards? With the slow vanishing of the Lisbon Strategy and the difficult implementation of a new programming period, the policy cards were reshuffled. The strong leverage of European structural policy on regional R&I strategy could have strengthened the prioritisation efforts in national R&I strategies but smart specialisation was not implemented by European R&I policies as proposed by the Innovation Union Flagship and the ERA policy. As a result, smart specialisation became restricted to a cohesion-only policy context principally aimed at mostly catching-up regions to promote spending of their (often abundant) ERDF more strategically, while the more developed regions, with (often) marginal funding from ERDF, were not encouraged to combine this funding with their own regional or national funding at a strategies for smart specialisation') to restructure their entire innovation system around priorities.²³ For most other 'customers' of ERDF or Horizon 2020 ²⁴ funds the strategic game remained to extract additional European money (or '*juste retour*') for national policies that remained poorly coordinated.

Nevertheless, the simultaneous development of more than 120 RIS3 (Research and Innovation Strategies for Smart Specialisation) has been a historic milestone for European innovation policy by any known standard to date. Although often misunderstood, the central message that structural change of the economy requires

²⁰ 'Regional Policy Contributing to Smart Growth in Europe'

¹⁸ Under-investment in our knowledge foundation; unsatisfactory framework conditions and too much fragmentation and costly duplication. The Communication recommends taking collective responsibility for a strategic, inclusive and business-oriented research and innovation policy; prioritising and protecting investments in our knowledge base and launching European innovation partnerships to pool resources and expertise to find solutions to societal challenges and to build competitive advantage in key markets. <u>https://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication_en.pdf</u>

¹⁹ "Design and implementation of research and innovation policies is steered at the highest political level and based on a multiannual strategy. Policies and instruments are targeted at exploiting current or emerging national/regional strengths within an EU context ("smart specialisation") – ... – A multi-annual strategy defines a limited number of priorities, preceded by an international analysis of strengths and weaknesses at national and regional level and of emerging opportunities ('smart specialisation') and market developments, and provides a predictable policy and budgetary framework. The strategy duly reflects EU priorities, avoiding unnecessary duplication and fragmentation of efforts, and actively seeks to exploit opportunities for joint programming, crossborder co-operation and exploiting the leverage effects of EU instruments." (In Annex 1: 'Self-assessment tool: Features of well performing national and regional research and innovation systems'

https://ec.europa.eu/regional_policy/en/information/publications/communications/2010/regional-policy-contributing-to-smart-growth-in-europe-2020

²¹ The concept of 'ex-ante conditionality' is different from its forthcoming successor of 'enabling condition' that will kick-in in the next programming period (2021-27) more as a loose evolution, although with a broader reach than research and innovation policy ²² A Reinforced European Research Area Partnership for Excellence and Growth Communication Brussels, 17.7.2012 COM(2012) 392 final p3. Also: "A key aim for ERA is also to reduce both brain drain, notably from weaker regions, as well as the wide regional variation in research and innovation performance, aiming at excellence across the Union through smart specialisation."
²³ Some of the leaders are Basque Country, Catalunya, Lapland and Emilia-Romagna.

²⁴ Horizon 2020 is the EU's framework programme for research and innovation with nearly €80 billion of funding available over 7 years (2014 to 2020). In 2021, the next programme will be Horizon Europe. See https://ec.europa.eu/programmes/horizon2020/en

the prioritisation of funding has been well received (despite being dodged by short term interests). In the wake of the Vanguard Initiative for Smart Growth though Smart Specialisation²⁵ more than 20 thematic smart specialisation partnerships have been established by DG REGIO, in cooperation with DG Internal Market, Industry, Entrepreneurship and SMEs (DG GROW), DG RTD and DG Agriculture and rural development (DG AGRI), under the S3 Platform (DG JRC) in different domains crucial for deep industrial transformation.²⁶ These partnerships were set-up with the explicit objective to combine financial resources for the co-funding of projects that are linked to cross-regional value chains.

But the implementation of smart specialisation strategies (S3) has been limited by the continuous fragmentation of innovation and transformation policies in the EU, between the different policy and policy domains at the regional, national and European level. The complexity of combining different administrative (and state-aid) regulations is not the cause. The European innovation policy fragmentation between different EU Commission departments with their own policy narratives and instruments²⁷ is one the main key reasons why the co-financing of transformation programmes and projects, within and between countries and regions, has proven to be an insurmountable obstacle. Practically no interregional co-investments projects have been realised up to now. Although regional innovation ecosystems are increasingly seen as a key element in a more place-based industrial policy^{28 29} the full potential of smart specialisation has not been used. Consequently, it can be argued that the implementation of smart specialisation as a new policy concept has still to take-off and needs to be better understood in order to implement any ambitious intra-European co-investment strategy such as the European Green Deal.³⁰

WHAT IS SMART SPECIALISATION ABOUT IN TIMES OF TRANSFORMATION?

If smart specialisation is to play a key role implementing transformation such as the Green Deal, it needs to be re-styled to transcend the cohesion policy framework and become mainstreamed in all transformation policies. This is not diminishing its importance for cohesion policy. Within cohesion policy (2014-2020), the smart specialisation conditionality was restricted to 'only' €41 billion of R&I investments linked to the objective 'Research and Innovation'. For restructuring the economy all policies need to support the priorities identified, including labour market policies and infrastructure policies. Smart specialisation has already waged battles that the Green Deal will have to finish.

Smart specialisation is an open-ended policy approach for transformation. It offers a new decentralised, European governance framework for the co-investment decisions that need to be taken, based on matching complementarities. Because of its co-creation dynamics it can inspire the necessary confidence in longerterm alliances and goals. But it can only work in synergy with political goal-setting mechanisms, like European missions, which are linked with investment commitments.

1. The essence of smart specialisation process is **transformation** of the economic structure, understood as the **specialisation structure** of the economy. I.e. the relative specialisation in activities at a certain spatial level (any functional region), compared with the distribution of these activities in a broader economic environment (i.e. the world economy). This shift in (international) specialisation is based

²⁵ See <u>www.vanguardinitiative.eu</u>

²⁶ See Thematic Smart Specialisation Platforms in S3 Platform

²⁷ The persistent walls between the digital transformation agenda, the mission-oriented policy approach and the new industrial policy for strategic value chains is a source of continuous confusion for all actors in EU policy bubble, where to go and how to combine these programmes. Maybe the most detrimental impact is on a policy culture of policy fads, short-termism and cynicism about the European capacity to act.

²⁸ See Asheim, B.T et.al. (2019) 'Regional Innovation Ecosystems', Edward Elgar, Cheltenham UK.

²⁹ For regional examples see <u>https://europa.eu/regions-and-cities/programme/sessions/352_en</u>

³⁰ <u>https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en</u>

on the further differentiation of the local assets in new competitive strengths for the future. Inevitably the relative strengths differ and seek complementarity in broader delivery systems for economic solutions (value chains). Smart specialisation is not looking at comparative advantages of the past but at competitive **positioning in the economy of the future**.

- 2. The act of faith of smart specialisation in the European innovation system is that our futures are intertwined and that there is a role for all European regions in finding these solutions for our common future. Smart specialisation can therefore by restyled as **smart complementarity** to highlight this interdependency.
- 3. The role of smart specialisations as **future oriented choices** of activities to invest in is increasingly important in big **systemic challenges³¹** that need the mobilisation of all resources. We need to align resources as effectively as possible based on place-based entrepreneurial opportunities triggered by a shared European vision.
- 4. The mechanism of smart specialisation is based on **identification of (mutually beneficial) opportunities**. This is a forward-looking endeavour (not vested interests) for co-creation of new longer-term 'co-opetition' conditions in the European internal market.
- 5. The smart specialisation strategies (expressed in earmarking public innovation and transformation funding) are linked to **unique cluster capacities** (innovation eco-systems) in territories with their own historic and geographical identities.³²
- 6. This place-based policy must be implemented by **all (regional, national and European) policy levels** that have competences that can support these places/clusters to use their potential for the pursued transformation.
- 7. Smart specialisation is contextual and requires **tailored policy mixes** and policy integration. It stimulates integration of innovation policy in the broader set of education, training, regulation and infrastructure policies to make it work.
- The combination of policy levels and policy domains is making smart specialisation a multi-level European style policy. It combines the European common vision with decentralised decision spaces.
- 9. The strategic **prioritisation** of investment decisions is the core of the governance behind the mechanism of smart specialisation. The entrepreneurial discovery process (EDP) is an appealing methodology enabling a smart role for public policy in the co-creation process of strategic clusters of the future. Political commitment is key for strategic investment policy, but a lot of policy innovation to structure the EDP is still ongoing.³³
- 10. In smart specialisation the **role of people** that can share trust in the future is crucial. People-centred policies are based on the valorisation of talent and on adjustments to labour market needs in a quickly evolving society, leaving no one behind. A 'Just Transition' gives a future to all.

³¹ See the increased interest in a mission-based approach to future EU research and innovation strategies. See

https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme/missions-horizon-europe en ³² The entrepreneurial discovery process of these activities favours the meso-economic dimension of economic policy (networks) over the traditional micro-economic (individual actors) and macro-economic policies (broad aggregates). This EDP requires a new combination of strategic planning with self-organisation. The Vanguard Initiative initiated a methodology 'Learn-connectdemonstrate-commercialise' (further developed in S3 partnerships) to identify common investment opportunities (with state-of-the art matching techniques and participatory decision making).

³³ Strategic governance networks connect the 'policy shapers' that bridge the political decision makers with the other stakeholders in this process. In these networks professionals in smart governance interact to prepare the ground for decision-making and coinvestment. This capacity for governance is composed of cluster managers; account managers in agencies and in departments for the relevant domains; investment fund managers specialised in these domains and other decision enablers such as specialised policy advisers in the Commission and dedicated staff in national and regional Brussels representations. This network is structuring an emerging (still weak and incomplete) governance for the S3 partnerships.

The most important characteristic of smart specialisation policy approach is that it changes fundamentally the day-to-day decision-making practices, by prioritising the longer-term structural transformation, with new forms of interactions (cross-border, cross-sector, cross-disciplinary).

WHY IS SMART SPECIALISATION AN INTRINSIC ELEMENT OF THE EUROPEAN GREEN DEAL?

The European Green Deal will not succeed without building capacity for strategic governance. This is a mutual success condition shared with European smart specialisation strategies. This need for better strategic alignment will be a core element in creating a new 'European style' mixed economy (with a new combination of environmental protection, productivity growth, stability and fairness). While market forces alone fail to bring systemic change, bureaucratic planning processes entail a high risk of government failures (because of limited information, being captured by rent-seeking interests or constrained by insufficient popular support). Smart specialisation avoids these failures with a new approach for pro-active alignment of complementary actors in the emerging value chains of the carbon neutral economy.

The European Green Deal introduces an exogenous constraint to the smart specialisation process since it puts a whole series of new criteria for future investments, and in itself, is a major top-down conditionality. Yet, closer examination would reveal the convergence of these processes: (a) climate and environmental criteria have already been introduced, for example, in the ERDF Regulation from the start of the current programming period (2014-20) and thus largely taken into account in the present design and implementation of smart specialisation strategies; (b) industrial restructuring is a major component of the success of the Green Deal and this can be engineered and facilitated through S3; (c) the directionality of national and regional investments in research and innovation are greatly facilitated by the introduction of the Green Deal that helps to streamline and provide new focus to innovative investments towards the global transformation.³⁴ Therefore, a further policy alignment, on common goals and frameworks, is a precondition for the success of major transformation efforts for new economic growth.

Smart specialisation and global strategy

Smart specialisation is a multi-level policy approach. The new growth strategy of the EU with a focus on the climate goal can be considered as a smart specialisation strategy for the whole of the EU in a global economy in transition, claiming global leadership in clean technologies and exporting successful solutions. But the global restructuring of value chains for sustainability will entail a decoupling of material and immaterial production (design globally, manufacture locally). This 'de-globalisation' of the material flows (because of internalisation of transport costs and more efficient digital technologies for local production) will be an opportunity for the re-industrialisation of Europe with a circular economy model, closing loops at the level closest to the users of customised product-service combinations. In such a transition, the capacities of quadruple helix clusters in EU countries, regions and cities, to adapt to the new sustainability enhancing regulations with new technologies and new social contracts, is our best competitive asset.

In EU economic policy, the global positioning of our green strengths will need to be structured through the alignment of our strategic clusters by developing smart complementarities. Strategic value chains that guarantee technological autonomy (such as the battery and AI for autonomous e-mobility) and critical mass for international competition must connect strong clusters in different parts of these value chains across the

³⁴ However, there are indeed constraints on the economic front, since the issues of global competitiveness, productivity and global fair-play remain on the table: while Europe strives for the European Green Deal, other global players may challenge its resilience by bypassing international principles and providing more competitive product and services at the expense of environmental and climate sustainability. This has the potential to de-stabilise European efforts, so a strict monitoring along with appropriate policy responses must be prepared and implemented.

EU, from design to after-sales support. A global Green Deal strategy needs smart specialisation in European networks of interlinked companies and clusters.

Smart specialisation has already attracted much international attention as a governance mechanism to involve all stakeholders in an entrepreneurial discovery process of new growth opportunities for regional development.³⁵ The Green Deal diplomacy should integrate smart specialisation to advocate a distinctly European policy model for implementing the UN Sustainable Development Goals (compared with the state-driven model or the laissez-faire), leaving no region behind. These broad-based and interdependent goals can only be implemented with a place-based approach.

Transformation strategy with a direction

To succeed in its transition to a climate neutral continent, European economic policy will have to focus on the medium to long term and move from incremental to systemic policies across all policy domains. Conventional approaches will not be sufficient' for such system innovation.³⁶ Missions will bring together a wide range of stakeholders including regions and citizens. For effective partnerships to support R&I in the Green Deal priority areas (energy, environment, mobility, housing, materials, food, etc.), smart specialisations strategies are the mechanism for implementation.

New industrial policy is at the core of such economic transformation to enable path-breaking innovations and business models for renewable energy, smart mobility and circular economy. These sectors offer ample opportunities for smart specialisation strategies all over the EU. The role of the Green Deal, with its long-term strategic goals, is to provide a sense of direction for mutually reinforcing public and private investments. Smart specialisation strategies will implement the broader national and European strategic frameworks – including strategic value chains for transformation such as the European Battery Alliance – with specific goals and opportunity-driven investments from local actors, and encourage the mutual alignment of specialised clusters across borders.³⁷ Therefore, smart specialisation is the necessary implementation strategy for the Green Deal. It combines direction (top-down approach by setting long-term goals that foster joint investment commitments) and autonomy (bottom-up approach for finding the most successful economic solutions through joint experimentation of new system solutions).

Co-investment strategy for common goals

The Green Deal is the ultimate chance for Europe to modernise outdated capital stock. The future of Europe is shaped by appropriate investments of today (an act of confidence in the future). The biggest policy challenge is to create the success conditions for bold investment decisions. Investments in infrastructures and innovation are critical (and innovation infrastructure in particular).³⁸ But these investments have been sluggish for a long time. The Lisbon Strategy attempted to reduce the gap in productivity growth of the EU with an investment drive for a building the most competitive knowledge economy, targeting the 3 % objective of R&D expenditure in relation to GDP. But the use of the 3% R&D objective to achieve the transition to a knowledge economy has failed.³⁹ What can we learn (from a smart specialisation perspective)?

³⁵ The S3 Platform has already a lot of demand for policy learning and setting-up support for S3 form different continents (Latin-America, Australia, Africa...)

³⁶ COM(2019) 640 final, Brussels, 11.12.2019 page 18, <u>https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf</u>

³⁷ A Smart Specialisation Partnerships Advanced Materials for Batteries for Electro-mobility and Stationary Energy Storage was launched in October 2018 <u>https://s3platform.jrc.ec.europa.eu/batteries</u>

³⁸ I.e. the network of (specialised) digital innovation hubs across the EU is the backbone of a European Innovation System (= the ERA at higher TRL levels) to enable piloting and demonstration of scalable Green Deal solutions.

³⁹ See <u>https://ec.europa.eu/eurostat/statistics-explained/index.php/R_%26_D_expenditure</u>

Firstly, because R&D is part of a broad mix of investments for structural change, the promotion of a knowledge economy cannot be done with traditional competitiveness policies for individual firms and projects alone. Networking and cooperation for R&D have been limited to the pre-commercial stage (far from the market or societal impact). But innovation (new ideas that are commercialised) happens in clusters of cooperating and competing firms and related institutes. Structural change that is limited to the deregulation of labour markets and improved framework conditions is not enough to escape from the lock-in of past economic structures. Therefore, economic structural change requires new regulations that promote new value chains. This is a new industrial policy without picking winners.

Secondly, European targets have not been clearly tailored to the dynamics of different local economies. This is caused by the place-neutral policy perspective of European R&I policies. Lagging regions and frontrunners were all supposed to reach the target individually. The lesson is that systemic changes require specific roadmaps and policy mixes for specific opportunities for different places: smart specialisation strategies which are interconnected.⁴⁰

Thirdly, European governance has been inadequate for such a system change. The open method of coordination, with multinational surveillance of national performance is limited to mutual learning and peer reviews. The monitoring of the European Research Area (ERA) dimension (based on the 2009 Treaty) in the national reform programmes (including the 3% objective) is limited to policy recommendations derived from the ERA policy framework. There is a need for a new paradigm for the ERA.

The lack of progress in the ERA and the need for deepening the ERA towards joint multi-level action has been acknowledged by the European Research Area Committee (ERAC), the Member States' Advisory Body for research and innovation policies. The need for a 'new narrative' with 'smart directionality' and 'whole of government approach' has been recognised in the ERAC Opinion on the Future of the European Research Area.⁴¹ This is a new chance for reconnecting joint efforts on common goals to smart specialisation. A European Innovation System that is geared towards transformation needs smart specialisation to manage complexity.

The matching of Green Deal and smart specialisation strategies is a winner. Because – finally – the national and regional transformation investment policy frameworks will be interlinked with strategies that connect the local clusters with complementary partners abroad and promote competition with similar ones on the basis of further differentiation. Self-contained national and regional competition strategies and 'target competition' (on R&D objectives) have proven to be ineffective to unleash systemic transformation. The new paradigm for knowledge-driven sustainable growth is based on capitalising on the enormous potential of knowledge spill-overs in clusters and networks which needs to be operationalised by open innovation and smart complementarity (co-investments).

THE ROLE OF THE REGIONS - THE ROLE OF A PLACE-BASED APPROACH

There is an increasing body of literature and acceptance of the key role of the regional dimension for stimulating and governing economic growth.⁴² This increasing interest has been stimulated by a place-based

⁴⁰ But smart specialisation strategies that reduce innovation investment policy to single priorities forget that this targeted transformation can only thrive on the basis of related variety. Not all economic policy and innovation is 'green', but all should be proofed for consistency with the Green Deal.

⁴¹ ERAC Opinion of 24 January 2020 <u>https://era.gv.at/object/document/5133/attach/Opinion Future of ERA adopted.pdf</u> The ERAC opinion proposes four main priorities for the future of the ERA: Framework conditions for the production, circulation and use of knowledge, including research career issues; R&I-driven joint action with other policy areas in a global context; Relevance and visibility of R&I for society; Broad inclusiveness. As a next step, the European Commission will prepare a Communication on a new ERA which is expected to be presented by mid-2020.

⁴² See Asheim, B.T, et.al. (2019) Advanced Introduction to Regional Innovation Systems. Edward Elgar, Cheltenham UK

approach to developing regional development strategies, making best use of endogenous resources. It is characterised by coordinating efforts of different regional stakeholders including amongst others governmental institutions, private industries, educational institutions, citizens and diverse non-government organisations and all levels of government. It is a highly collaborative approach making different stakeholders in a region working together. Thus, it combines two fundamental aspects: first, it assumes that geographical context really matters for its social, cultural, and institutional characteristics, and second, it focuses on knowledge development in policy intervention, by promoting interactions of enterprises, local groups and policy decision makers.⁴³

A place-based policy is specifically tailored to developing existing advantages, specialities and capabilities and extending them into new growth trajectories within a region. These, in turn, are rooted in a location's history, culture and geography. The emphasis is upon place – and knowledge – rather than sectors. Place-based policies are therefore geared towards using local characteristics, complexity and interconnectedness to spur local and more inclusive growth. Place based strategies combine proximity and critical mass to both bring together a set of stakeholders but also to access knowledge and funding to pursue chosen development strategies.

A recent Committee of the Regions' opinion drafted by the Rapporteur Adam Struzik (PL/EPP),⁴⁴ suggested that the UN Sustainable Development Goals (SDGs) could work as guiding principles in the development of regional or local development strategies. However, to be a successful guiding principle, Struzik suggests that many conditions are necessary. These conditions include synergies between individual sectoral tools and the adequate involvement of stakeholders, to guarantee a bottom-up and place-based approach to economic, social and territorial development. This place-based approach should also emphasise a territorial approach by making full use of the potential of integrated tools such as community-led local development (CLLD) and integrated territorial investment (ITI).⁴⁵

In addition, these strategies have a European-wide dimension. Another recent Committee of the Regions' opinion drafted by the Rapporteur Eamon Dooley (IE/Renew Europe),⁴⁶ expresses concerns over various shortcomings in the ERA framework regarding research infrastructure that reduce its potential benefits and efficiencies. Dooley argues that,

To address grand challenges, such as climate change, research infrastructures must be capable of integrating with those of neighbouring regions, thus creating greater knowledge-sharing and contributing to interdisciplinary research...(The opinion is) especially supportive of linking R&I policy with the development and implementation of S3 as these are innovative approaches to boosting economic growth, job creation based on identified regional needs, linking and involving regions in R&I activities.⁴⁷

Research and Innovation infrastructures are one of the core instruments for local and regional governance of transformational development strategies. In order to achieve the Sustainable Development Goals set out by the Paris Agreement and combat the effects of climate change at local level, it will be needed to develop smart specialisation processes at local level and to increase the territorial attractiveness of cities (smart cities within regional smart specialisation strategies). The next ERDF programme will increase support for the modernisation of the local public sector in relation to economic development, based on an entrepreneurial

https://cor.europa.eu/en/our-work/Pages/OpinionTimeline.aspx?opId=CDR-896-2019 47 Ibid

⁴³ <u>https://cor.europa.eu/en/our-work/Pages/OpinionTimeline.aspx?opId=CDR-5941-2018</u>

⁴⁴ https://cor.europa.eu/EN/our-work/Pages/OpinionTimeline.aspx?opId=CDR-644-2019

⁴⁵ See <u>http://www.europarl.europa.eu/RegData/etudes/IDAN/2019/636472/IPOL_IDA(2019)636472_EN.pdf</u>

⁴⁶ Research Infrastructures – the Future of the European Research Area (ERA) from a Regional and Cross-border Perspective,

approach and aimed at enforcing its role given the challenges posed by global governance. More funding will also be available for cities supporting integrated strategies for sustainable urban development.⁴⁸

These strategies will outline the direction of decisions and actions to define the goals and priorities of each specific region and city, in close connection with both relevant Member States and European strategies. This is precisely the remit of smart specialisation.

Successful strategies also require administrative and institutional capacity at the local and regional level. This would include the ability to incorporate 'functional areas' combined with a stronger willingness to collaborate with neighbouring regions. But foremost, a European impact of interregional development strategies, such as smart specialisation, needs political commitment of regional leaders that understand the European opportunities. The Vanguard Initiative is an example of such actions driven by political commitment to cooperation for European modernisation.

SMART SPECIALISATION AND NEW INDUSTRIAL POLICY

In 2013, the OECD analysed smart specialisation in the context of the emergence of a new industrial policy. The OECD Study 'Innovation-driven Growth in Regions: The Role of Smart Specialisation',⁴⁹ identified smart specialisation as vertically oriented policy framework that combined bottom-up and top down process in priority setting for public investments in knowledge, at the regional level.

Like traditional industrial policy, smart specialisation strategies aim to address market/systems and co-ordination failures. But traditional industrial policies required significant levels of information to justify subsidy support and they tended to be implemented in vertically integrated sectors with stable technological paradigms. In contrast, smart specialisation recognises the lack of perfect information, the level of advancement of a given activity, and the relative risks for policy. It thus focuses on helping entrepreneurs identify their knowledge-based strengths at the regional level and in a more exploratory approach in which public decision makers listen to market signals using a range of assessment tools (e.g. SWOT analysis, surveys) and mechanisms such as public-private partnerships, technology foresight and road mapping to name a few.⁵⁰

Smart specialisation 'strategies' can be viewed as a mix of modern industrial policy with innovation policies that emphasise a bottom-up approach (the entrepreneurial discovery), transparency (e.g. monitoring and evaluation) and flexibility (e.g. abandon failure programmes). But the emergence of this policy approach is by no means independent from the present economic and political context of disruptive change at the global level.⁵¹

In fact, the concept of 'entrepreneurial discovery' was transferred by smart specialisation founding-father Dominique Foray from the work of Dani Rodrick on new industrial policy, introducing the need for 'selfdiscovery' to avoid picking winners.⁵² Smart specialisation therefore inspired many policy actors in search for a new industrial policy approach.

⁴⁸ See a Proposal for a Regulation on the European Regional Development Fund and on the Cohesion Fund See COM(2018) 372 final See <u>https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52018PC0372&from=EN</u>

⁴⁹ <u>https://www.oecd.org/sti/inno/smart-specialisation.pdf</u>

⁵⁰ Ibid p12

⁵¹ Ibid p22

⁵² Rodrik D. (2004) "Industrial Policy For The Twenty-First Century", <u>http://cemi.ehess.fr/docannexe/file/2738/rodrik_2004.pdf</u>

[&]quot;the right way of thinking of industrial policy is as a discovery process where firms and the government learn about underlying costs and opportunities and engage in strategic coordination"

In November 2013, the 'Vanguard Initiative New Growth through Smart Specialisation'⁵³ was established on the initiative of Flanders and other ambitious regions, in order to promote a stronger role for regions in EU innovation policies by Smart Specialisation and regional collaboration in advanced manufacturing – an industrial policy priority area. The Communication on new industrial policy, published in January 2014, made an opening to smart specialisation.⁵⁴

Building on the work of the task forces, the Commission proposes to Member States to combine regional and industrial policy tools to create Smart Specialisation Platforms to help regions roll out smart specialisation programmes by facilitating contacts between firms and clusters, enabling access to the innovative technologies and market opportunities.

DG GROW (under the former Commissioner E. Bienkowska, a former Minister for Regional Development in Poland) was open to this new bottom-up approach. Together with DG REGIO it was at the origin of the 'Thematic Smart Specialisation Platform for Industrial Modernisation'^{55 56} that was inspired by the four-step discovery methodology developed by the Vanguard Initiative,⁵⁷ resulting in twenty partnerships.⁵⁸ This Platform started a 'co-governance' mechanism between the Commission services and the lead-regions of each partnership.

Although these were important steps, they remained isolated from mainstream industrial policy. Besides cluster policy⁵⁹ (which is also a rather isolated policy domain) DG GROW industrial policy has tended to ignore the mainstreaming of smart specialisation in the new strategic value chain approach. It remained for them a regional implementation policy, to link regional funds to the leadership of sectoral approaches.

DG REGIO has adopted smart specialisation as an innovation-led strategy for structural change.⁶⁰ Its key figures report that over 120 smart specialisation strategies have been developed and over €67 billion has been made available to support these strategies, under the European Structural and Investment Funds and national/regional funding. Expected achievements by 2020 are: 15,000 new products on the market, 140,000 new start-ups and 350,000 new jobs.⁶¹ But it is not clear what the impact is of this funding has had on the transformations announced in RIS3.

With its Communication 'Strengthening Innovation in Europe's Regions: Strategies for resilient, inclusive and sustainable growth',⁶² the Commission has identified four main challenges to regional innovation, with smart specialisation as a response, as well as some pilot actions to tackle them. These pilot actions were launched by the end of 2017 by DG Regio to promote larger investments in interregional innovation projects and accompany the industrial modernisation of less-developed regions. The aim of the pilot action ⁶³ is to help these partnerships scale up their projects in priority sectors such as big data, bioeconomy, resource efficiency, advanced manufacturing or cybersecurity and develop interregional co-investment. One such pilot under the smart specialisation pilot action for interregional innovation was a tailored support to

⁵⁸ <u>https://s3platform.jrc.ec.europa.eu/thematic-areas</u>

⁵³ <u>https://www.s3vanguardinitiative.eu/.</u> The initiative was started by Flanders region to find support for its 'New Industrial Policy' at European level.

⁵⁴ For a European Industrial Renaissance COM (2014) 14 final, see also COM (2017) 479 final.

⁵⁵ <u>https://s3platform.jrc.ec.europa.eu/industrial-modernisation</u>

⁵⁶ https://ec.europa.eu/growth/industry/policy/smart-specialisation_en

⁵⁷ <u>https://www.s3vanguardinitiative.eu/pilotinitiatives</u>

⁵⁹ European Strategic Cluster Partnerships for smart specialisation investments (ESCP-S3), <u>https://www.clustercollaboration.eu/eu-</u> cluster-partnerships/escp-s3

⁶⁰ The 'Smart and Sustainable Growth' unit in DG Regio (led by Mikel Landabaso) was instrumental in combining smart specialisation with the regional innovation system approach. This Unit is coordinating smart specialisation policy development across policy departments in the European Commission.

⁶¹ https://ec.europa.eu/regional_policy/sources/docgener/guides/smart_spec/strength_innov_regions_en.pdf

⁶² <u>https://ec.europa.eu/regional_policy/en/information/publications/communications/2017/strengthening-innovation-in-europe-s-regions-strategies-for-resilient-inclusive-and-sustainable-growth</u>

⁶³ https://ec.europa.eu/commission/presscorner/detail/en/IP 17 3501

an interregional partnership to develop and scale-up joint projects in advanced materials for batteries, in coordination with the Battery Alliance.⁶⁴. But such results are rare because support actions are targeted at commercialisation, with tangible products and employment as desired output, biased towards short-term projects and incremental changes. In transformation policy, the capacity building for long-term action plans comes first.

In post-2020 cohesion policy smart specialisation has been repositioned as an 'enabling condition' for the first of its five policy objectives: 'A smarter Europe by promoting innovative and smart economic transformation'. This enabling condition is labelled 'Good governance of national or regional smart specialisation strategy', with a number of fulfilment criteria that should inspire transformation strategies that serve broader goals and can involve much more than research and innovation, in particular digitalisation of industry, SME competitiveness, skills. But these strategies are no longer subject to a European assessment.

Convergent narratives in research and innovation, industrial and regional policies find each other in the recognition of innovation-led growth with a tailored approach to local conditions and coordination for using these local strengths for European objectives. To assess S3 a new type of concurrent assessment of transformations is needed, called 'diagnostic monitoring⁶⁵, with new indicators on investment behaviour. But institutional divides still prevent a much more coherent policy framework that would include mainstreaming of smart specialisation. The policy coordination in the European Commission on smart specialisation failed because of a top-down push of own instruments prevailed over shared responsibility to support place-based innovation and transformation.

Although smart specialisation is now recognised as a driver for transformation in innovation, industrial and regional policy domains, embodying the spirit of new industrial policy as discovery process, its operationalisation has been dominated by an opportunistic attitude of traditional policies towards 'access to ERDF money'. In the next ERDF programme period, smart specialisation will lose its 'ex ante conditionality'. The challenge now is to couple smart specialisation again to a truly European transformation objective.

SMART SPECIALISATION AND THE EUROPEAN GREEN DEAL INVESTMENT PLAN

The nature of smart specialisation as an investment strategy for modernisation makes this an obvious ally of the Green Deal. The Green Deal as comprehensive policy framework for the transformation of the EU economy requires a framework to facilitate sustainable investment.

The Sustainable Europe Investment Plan is instrumental in **mobilising the investments necessary** to reach the ambitious objectives set by the European Green Deal. By committing to mobilise at least €1 trillion of sustainable investments over the next decade through the EU budget, the Commission sets a very concrete objective of its own, against which progress will be monitored. The plan also includes a commitment to use all relevant policy levers to provide private and public investors with a framework that enables sustainable investments to the maximum extent possible. It also entails a renewed commitment to provide the necessary project planning and execution support to authorities and project promoters. Given the magnitude of the financing needs, the Commission is committed to further explore how to mobilise additional funding to achieve the European Green Deal objectives.⁶⁶

⁶⁴ <u>https://ec.europa.eu/regional_policy/en/newsroom/news/2018/10/10-08-2018-eu-battery-alliance-regions-join-forces-to-build-a-strong-industrial-value-chain-in-advanced-materials-for-batteries</u>

⁶⁵ See Yevgeny Kuznetsov, Charles Sabel 'Managing Self-Discovery: Diagnostic Monitoring of a Portfolio of Projects and Programmes' in 'Advances in the Theory and Practice of Smart Specialisation' (edited by Slavo Radosevic et. al.)

⁶⁶ Sustainable Europe Investment Plan - European Green Deal Investment Plan, 14.1.2020 COM(2020) 21 final, p 23, <u>https://ec.europa.eu/commission/presscorner/detail/en/FS_20_48</u>

Co-investments in smart specialisation partnerships undoubtedly belong to the emerging comprehensive investment framework for the sustainability transition to be able to mobilise at least €1 trillion of private and public investments from every corner of the EU.

Smart specialisation strategies shape the leading role of public funds to de-risk projects and leverage private funds in new growth domains. It is crystal clear that the mere size of the climate challenge over a broad range of domains demands a coordinated effort that will build on relative strengths and opportunities for local eco-systems, including in transition regions.

Public actors are the main investors in certain sectors, especially infrastructure and public services. In many cases, public authorities need to play a guiding and coordinating role for sustainable investments. Public authorities may also need to invest when market actors cannot step in, in particular, when the social and environmental benefits are not reflected in private returns, or when projects are considered too risky. Where these investments often have a cross-border nature and spill-over effects across Member States, the Commission needs to play a coordinating role at the EU level. The European Semester provides a well-established framework for the coordination of economic and employment policies that will facilitate the necessary investment for the green transformation from the EU and its Member States. The Semester contributes to the identification of investment priorities and barriers in each Member State. The country reports will match the available sources of financing through EU funds with the country-specific challenges identified in the reports, among others in view of climate, environmental and social policy objectives. A joint effort between the EU and its Member States should ensure that the investments are directed to the most sustainable projects.⁶⁷

Smart specialisation strategies contributing to specific transition domains across the EU (e.g. different types of energy transition investments) therefore need to be a full part of the EU Semester for monitoring progress in the Investment Plan. The place-based, challenge driven transformation in these strategies will enable the emergence of new specialisation structures that shape world leaders, as well as transforming the specialisation structure of transition (including coal) regions, always in an outward-looking transregional perspective.

In the recent European Commission proposal for a Regulation establishing the Just Transition Fund,⁶⁸ the Commission has proposed to set up a 'Just Transition Platform' to enable bilateral and multilateral exchanges of experience on lessons learnt and best practices across all affected sectors building on the existing platform for coal regions in transition. This would be a possible opportunity to involve smart specialisation as in the existing Coal Regions Platform⁶⁹ which the regulation refers to and notes that,

Multi-stakeholder dialogue and knowledge sharing proved to be essential to ensure collective progress, transparency and mobilisation of the most effective means for addressing the socioeconomic impacts of the transition. Support is focused on economic transformation in line with smart specialisation strategies (e.g. support to SMEs, business incubators, innovation and cooperation of industry and researchers), the reskilling of workers traditionally employed in coal-related sectors and the promotion of energy efficiency and alternative, renewable energy sources.⁷⁰

These transformation investments are particularly targeted on testing and demonstrating new approaches for de-risking private research and innovation investment in new growth opportunities and for the deployment of solutions found in new application areas and local circumstances. The great strength of smart

⁶⁷ Ibid.

⁶⁸ COM(2020) 22 final, 14.1.2020

⁶⁹ https://ec.europa.eu/energy/en/topics/oil-gas-and-coal/EU-coal-regions/secretariat-and-technical-assistance

⁷⁰ Ibid page 7

specialisation is that it initially requires thought about redirecting priorities within existing budgets and own funds, before targeting new European money. This smart specialisation co-investment framework will help the coordination effort at the European level thanks to informed decisions at local level how to build smart complementarities without the pitfalls of bureaucratic investment allocations.

But the most important condition for a successful sustainable investment strategy is a renewed sustainable financing strategy. Financial instruments at the European level are mainly implemented at project level (often neglecting the long-term) and focussing on individual ventures (often neglecting interdependence). Present assessments for 'bankable projects' favour incremental innovation by individual companies, because there is no expertise for assessing the risks of investments in systemic solutions and new value chains. Smart specialisation investment strategies have revealed that we lack financing mechanisms that match the need for co-investment. What is an opportunity for a mutual reinforcing return on investment is therefore perceived as a non-manageable risk.⁷¹ The 'EU taxonomy', the framework to facilitate sustainable investment ⁷² offers a window of opportunity to change the logic of the financial system.

If these lessons are not well understood, we risk a lock-in in the old economic policy frameworks that are powerless for fighting the climate crisis. Smart specialisation has already evolved from traditional economic growth paths to a new industrial strategy approach characterised by missions, clusters and strategic value chains. Smart specialisation comes with a package of related policy changes and is the driver of new industrial policy approaches for transition. The Green Deal can take advantage of this experience.

NEW GOVERNANCE FOR THE GREEN DEAL

The new growth strategy needs institutions for dealing with the complexity of multi-actor, multi-level and multi-policy system changes. One important commitment of the European Commission with the Green Deal is the commitment to reach out to the European citizen with a **Climate Pact** by encouraging information sharing, developing spaces to work together on ambitious actions and building capacity to facilitate grass-roots initiatives.⁷³ Smart specialisation finds its legitimacy in a bottom-up governance process in places, for identifying priorities with European dimension. The use of the Entrepreneurial Discovery Process – a key aspect of smart specialisation – enables a range of regional stakeholders to contribute to priority setting. This bottom up exercise in better engaging the local and regional level is also part of the 'active subsidiarity' approach outlined by the European Commission.⁷⁴ This governance can set in motion a long-term rejuvenation of our democratic institutions for guiding the economy, and dynamise the underlying mixed economy model which will be congruent with the growth strategy. Joint ownership for the longer-term investment efforts and future choices by all stakeholders is essential.

But the implementation of the first generation of smart specialisation strategies has shown that such new governance structures are not one-off political events, but need persistent process-building, to continue and deepen common investment commitments. The true governance process of smart specialisation development and implementation is a democratic process of ongoing stakeholder involvement in

⁷¹ The commitment of partners for joint S3 climate roadmaps can be used as a label: "increased opportunities will be provided for investors and companies by making it easier for them to identify sustainable investments and ensuring that they are credible. This could be done via clear labels for retail investment products and by developing an EU green bond standard that facilitates sustainable investment in the most convenient way." p. 17 Communication 'European Green Deal'

 ⁷² The EU Taxonomy will determine whether an economic activity is environmentally sustainable, based on performance criteria for its contribution to at least one of the six environmental objectives." COM (2020) 21 Sustainable Investment Plan.
 ⁷³ COM(2019) 640 final, Brussels, 11.12.2019

⁷⁴ 'More "active subsidiarity" is needed which gives a stronger voice to the local and regional authorities and national Parliaments and which promotes ownership of what the Union does'. Active is defined as ' an improved engagement with all stakeholders and local and regional authorities throughout the entire policy cycle'. See COM(2018) 703 final 23.10.2018 The principles of subsidiarity and proportionality: Strengthening their role in the EU's policymaking, page 6

entrepreneurial discovery. A governance mechanism for the Green Deal can learn a lot from smart specialisation if it wants to make a 'deal'. It is a European federative approach that is intrinsically linked with the transformation of Europe by its citizens (by purpose and methodology).

The key success factor for the Green Deal will be the ability of public authorities to drive policies towards Sustainable Development Goals and 2050 goals. In order to monitor the investments and actions of this multitude of agendas, the European Commission should develop a reference framework with a common methodology and terminology (common indicators between SDGs and 2050 programmes), which would enable sound coordination between governments, peer learning and benchmarking.

The European Semester and Annual Growth Strategy is deemed to play a key-role in giving direction and therefore must organise the follow-up of smart specialisation strategies for the further elaboration and implementation of investments (and other resources) for the green modernisation. Smart specialisation strategies mirror the European directions in targeted investments for concrete places and contexts. There is also a strong argument that national and regional co-funding of these 'green' investments should not be considered as deficits in national accounts⁷⁵.

The macro-economic coordination and thematic recommendations are not enough for navigating the efforts of European citizens, companies and institutions in the countries and regions. A key reference point for annual reviews on progress towards 2050 milestones is the positive drive for new opportunities for transformation in leading clusters with smart specialisation strategies.

The continuous further elaboration and implementation of investments (resources) in an economic transition that opens new possibilities for living, working, learning in places, requires a broader citizen involvement and the involvement of local authorities close to the citizens. Quadruple helix policies can reflect this new mixed economy (enriching triple helix with cities and citizen initiatives for the Green Deal). Smart specialisation is a driver of strategic choices, in places where people live together, for common futures in an interdependent choice environment. Strategic clusters are at the heart of smart specialisation⁷⁶ but they can only be successful if facilitating financial mechanisms can be created.⁷⁷ This strategic financing demands a higher involvement of financing institutions in strategic clusters and the follow-up of implementation of smart specialisation in strategic value chains.

In order to play such a key role, the present smart specialisation strategies should be further developed into outward looking 'RIS3 2.0' in order to capitalise on interregional co-investments in common value chains and system solutions. This place-based European approach should be a shared responsibility of all European policy makers. The political ownership of the mainstreaming of smart specialisation in all policies is, however, an unresolved problem because of the lack of an integrated innovation and transformation policy framework. The European Green Deal is the emerging framework where smart specialisation should be repositioned at European and national levels.

⁷⁶ 'European strategic cluster partnerships for smart specialisation investments' (<u>https://www.clustercollaboration.eu/eu-cluster-partnerships/escp-s3</u>) is a programme with potential but is not well connected to other instruments, such as 'S3 partnerships'. Another programme on 'Clusters of change' has started.

⁷⁵ Here there is an opportunity for the European Structural and Investment Funds to finance the 'localisation of SDGs' by urban and regional authorities, and support cities in achieving the principles of the Leipzig Charter. Agreed in 2007 under the Lisbon Strategy, the Charter argues that 'We increasingly need holistic strategies and coordinated action by all persons and institutions involved in the urban development process which reach beyond the boundaries of individual cities'. https://ec.europa.eu/regional_policy/archive/themes/urban/leipzig_charter.pdf

⁷⁷ The Sustainable Europe Investment Plan should not only provide more funds but also different funding mechanisms. An example is ECB green bonds for mobilising public savings in cooperative ownership of wind parks or other place-specific assets. Financing bodies have to develop capacities and criteria to attribute positive evaluation to the higher socio-economic value of joint user-supplier investments and combination of complementarities, with a positive label for co-investments instead of penalising risks.

CONCLUSION

This sustainable growth strategy will require all policies to contribute to a climate neutral economy (with opportunities for all, leaving nobody behind). The Green Deal and smart specialisation bring strong positive narratives for Europe and all places in Europe.

Smart specialisation has risen out of the limitations of the Lisbon Strategy to shape joint investment strategies for the knowledge economy and is asserting its role as a transformation policy approach for the real economy in real places, building on their unique clusters to position and align new value chains for future growth. If the Green Deal is not to suffer the same fate as the Lisbon Strategy, it needs to incorporate both the policy and governance learning available from smart specialisation and combine smart specialisation with the Green Deal as an ambitious but achievable new European growth strategy.

Mainstreaming smart specialisation for all transformation policies and especially for the Green Deal's encompassing system approach should be considered a high priority for Europeans in all institutions that care for the future of the European vision. This means enlarging co-ownership of the smart specialisation policy approach, as a federative European approach, ready to play its role in the successful implementation of the Green Deal and its future policies and actions.

Annex 1

Brussels, 6.10.2010 COM(2010) 546 final

Europe 2020 Flagship Initiative, Innovation Union

In a global environment, Europe must also develop its own distinctive approach to innovation which builds on its strengths and capitalises on its values by:

Involving all actors and all regions in the innovation cycle: not only major companies but also SMEs in all sectors, including the public sector, the social economy and citizens themselves ('social innovation'); not only a few high-tech areas, but all regions in Europe and every Member State, each focusing on its own strengths ("smart specialisation") with Europe, Member States and regions acting in partnership.

Innovation Union commitments

Starting in 2010: Member States should considerably improve their use of existing Structural Funds for research & innovation projects, helping people to acquire the necessary skills, improving the performance of national systems and implementing smart specialisation strategies and trans-national projects. This should also apply to the pre-accession funding for EU candidate countries. The Commission stands ready to assist and will use its regional research and cluster initiatives to support this change and establish a "smart specialisation platform" by 2012, including further support for the emergence of world class clusters. Further details are in an accompanying Communication.

Member States should initiate the preparation of post 2013 Structural Fund programmes with an increased focus on innovation and smart specialisation. Future regulations governing the operation of the European Regional Development Fund should further commit substantial financial resources to support innovation initiatives within the regions of the European Union. 4.2. Increasing social benefits Social innovation is an important new field which should be nurtured.

A commitment by all to turn Innovation Union into reality

The Member States (and their regions) should ensure that the necessary governance structures are put in place where these do not yet exist. They should conduct thorough self-assessments, EN 31 EN and look for ways to reform their systems to promote excellence, foster closer co-operation and pursue smart specialisation from an EU perspective. They should review their operational programmes co-financed by the Structural Funds, in line with priorities fixed under Europe 2020, and seek to allocate additional resources to research and innovation

Quotes taken from the Communication see

https://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication_en.pdf

Annex 2: Friends of Smart Specialisation Mission Statement

The Friends of Smart Specialisation is an informal group of independent innovation policy experts, set up in Brussels in 2018. The group's goal is to enhance the smart specialisation⁷⁸ approach as an instrument for strengthening the multi-level European innovation system. The group therefore aspires to be a resource for policy makers and shapers at all levels. The following 10 principles are proposed to guide the further work of the group towards mainstreaming smart specialisation in a coherent way:

In the group's view, Smart Specialisation:

- Is a key feature of multi-level governance of innovation and transformation investments in the EU.
 Furthermore, efficiency and effectiveness can only be achieved by a synchronisation of priorities. For this to happen, Smart Specialisation provides a decision mechanism in a dynamic context.
- 2. Offers a decentralised model of coordination to avoid fragmentation of investment efforts and an unnecessary duplication at EU level which undermines the competitiveness of European actors at a global scale. Isolated efforts often remain at sub-critical scale. Smart specialisation informs and supports the positioning of European actors.
- 3. Is an approach for self-discovery of opportunities in system transitions. It is driven by the search for European added-value (therefore focussing on higher TRL-levels in implementing innovation).
- 4. Requires a place-based innovation approach at all levels, as well as an integrated policy mix to support entrepreneurial actors (in quadruple helix mode) across the board.
- 5. Is a bottom-up co-creation process of new futures while at the same time requiring top-down leadership to set the proper direction.
- 6. Is a governance and policy approach that is geared towards strategic targeting of public-private investments in support of a thorough transformation process. While the entrepreneurial discovery (EDP) sets the direction, smart specialisation strategies are foremost government commitments to mobilise public and private resources in a strategic manner.
- Requires a governance capacity to organise the EDP as strategic co-creation process (strategic road mapping of joint commitments and diagnostic monitoring of their implementation). This governance capacity must support and train place-based actors, able to join up triple helix⁷⁹ players and act transnationally.
- 8. Requires a new kind of strategic intelligence that is forward looking (avoiding lock-ins) and seeks complementarities (not only benchmarking with peers).
- 9. Has a close link with regional transformation policies, often based on clusters with their unique development and demonstration capacity, and cities often acting as living labs.
- 10. Needs to be further mainstreamed so that it becomes a necessary component of a genuine European integration. For this to happen, all actors need to contribute to common goals and align themselves to new development opportunities.

For more information you may wish to contact:

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⁷⁸ For a definition of the concept of Smart Specialisation, please see <u>http://s3platform.jrc.ec.europa.eu/home</u>

⁷⁹ You can find more on the Triple Helix at <u>https://www.triplehelixassociation.org/</u>