VANGUARD INITIATIVE
NEW GROWTH THROUGH SMART SPECIALISATION
Engagement for a European Industrial Renaissance
COLOPHON

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Successful launching of the Vanguard Initiative New Growth through Smart Specialisation at the occasion of the High Level Event ‘Regions as motors of new growth through smart specialisation’ at the European Parliament, 8th of November 2013.
Origin of the Vanguard Initiative

The Vanguard Initiative New Growth through Smart specialisation’ originated on the occasion of the High-Level Conference ‘Regions as motors of new growth by smart specialisation’ that was co-organised by the European Commission’s DG Regio and the Flemish Government on 8 November in the European Parliament, with the support of the President of the European Council Herman Van Rompuy and of the Committee of Regions.

The participating regions have committed to smart specialisation not only as the ex-ante conditionality for the European cohesion policy but as a guiding principle for their innovation and industrial policies to spur competitiveness and new growth. The preparation of a European Council with a focus on European industrial policy, provides a stimulus to send clear messages about the importance of the regions and of the bottom-up partnerships for smart specialisation across regions, for new industrial growth.

The Declaration of the Vanguard Initiative for New Growth through Smart Specialisation was adopted on 8 November 2013 by high political representatives from 10 European regions: Basque Country, Flanders, Lombardia, Malopolska, North Rhine Westphalia, Scotland, Skåne Region, Southeast Netherlands, Tampere Region and Wallonia. The partnership is open to all regions that share its ambition for actively co-creating a more effective multi-level governance of industrial policy through co-operation with the European Commission and leading by example in interregional cooperation. In the period between 8 November 2013 and early January 2014 additional regions committed to giving political support to the Vanguard Initiative: Rhône-Alpes, Upper-Austria, Norte (PT), Baden-Württemberg, Asturias. Others are in the process.

The High-Level Conference was an important step in recognising the role of smart specialisation in the European policy framework. The President of the European Council Herman Van Rompuy, Commissioner for Regional and Urban Policy Johannes Hahn, the Commissioner for Research and Innovation Máire Geoghegan-Quinn and the Cabinet of the Commissioner in charge of Enterprises Antonio Tajani explicitly supported the strategic role of smart specialisation. The announcement of the Vanguard Initiative by Flanders’ Minister-President Kris Peeters gave the Conference a special impetus.

Commissioner for Regional and Urban Policy, Johannes Hahn applauded the founding of the Vanguard Initiative in his closing speech at the High Level Event: ‘This is the kind of bottom-up initiative and ownership that we are of course happy to endorse. It combines the strategic with the practical and helps to bring smart specialisation to the next level. This also shows that smart specialisation strategies can bring together regions not only within one Member State, but also encourage cross-border cooperation.”

The positioning as Vanguard Initiative for smart specialisation has received a good reception from regions as well as Commission services. It contributes to the further embedding of the smart specialisation approach across policy levels.

It is the ambition of the Vanguard Initiative for New Growth through Smart Specialisation to accelerate further this mainstreaming of smart specialisation in the European industrial and innovation policies and demonstrate that the regions can be a leading actor in the mobilisation of all policy levels and all stakeholders for new growth.
Point of views on Smart Specialisation of key decision-makers

Point of view of Minister-President of the Government of Flanders Kris Peeters

This Initiative is a big step in the right direction towards a prosperous future for Europe's industry...

It is important that our common voice is clearly heard. The European Council in Spring will be a key moment in that respect. That is why we have proposed to send a joint letter to the European Council, the European Parliament and the European Commission. That Letter and the paper annexed to it, will make our common position clear to those around the table of the Council....

The Regions that are gathered in the Vanguard Initiative, all have promising smart specialisation strategies in play. It is important to learn about these strategies, so that we can reinforce each other...

We should also focus on building strong collaborations. I hope that this Vanguard Initiative can grow into new initiatives that are breeding grounds for multilateral cooperation between regions. By working together, we can be drivers for truly European clusters. It is this kind of bottom-up approach that has to make the difference. And it is this kind of approach that deserves top-down support from the European level. Regional governments have to act as moderators that stimulate the creation of industrial clusters that transcend our borders. We have to act as match makers between our leading and future oriented industrial sectors.

Extract from the speech during the lunch-meeting at the High Level Event 'Regions as motors of new growth through smart specialisation' 8th of November 2013

MINISTER-PRESIDENT OF THE GOVERNMENT OF FLANDERS

Kris Peeters
Point of view of European Commissioner for Regional and Urban policy Johannes Hahn on Smart Specialisation

Smart specialisation has been placed onto the European growth agenda with the Innovation Union initiative and by introducing it an ‘ex ante conditionality’ for ERDF funding.

It is a new approach to increase the impact of funding for generating growth and jobs at European scale in areas that are designated by the regions themselves as their competitive opportunities.

I congratulate the regions that came up with this Vanguard Initiative and I hope that many more regions will commit themselves at a political level to jointly implement smart specialisation and maximise the complementarities between their investment strategies and with European-level strategies.

This is a unique opportunity for Europe and its regions. The next 7 years financial perspective will be crucial not only for Regional Policy but for firing up the micro-economic engine across Europe through our growth-enhancing investments.

Extract from the intervention on the High Level Event 'Regions as motors of new growth through smart specialisation' 8th of November 2013

Point of view of European Commissioner for Research and Innovation Máire Geoghegan-Quinn on Smart Specialisation

We face the challenge of developing research and innovation policy - whether at the regional, national or EU levels - in a time of crisis. Smart investments in research and innovation are vital to create jobs and put Europe back on a growth path. This is why research and innovation are at the heart of the next EU budget both in Horizon 2020 and in cohesion policy.

If resources for research and innovation investments are scarce, it only makes sense to use smart specialisation to concentrate on sectors where funding will have the most impact. Smart specialisation will be a good yardstick for identifying growth priorities in order to maximise the impact of investment in research and innovation on growth, employment and the knowledge economy. Funding from Horizon 2020 will continue to be allocated on the basis of excellence, while cohesion funding can take account of broader economic and social development criteria.

Nevertheless, the identification through smart specialisation of priority sectors where the Member States and regions have particular strengths should lead to more successful participation in Horizon 2020.

Extract from the speech on the High Level Event 'Regions as motors of new growth through smart specialisation' 8th of November 2013
We need to systematically develop the coordination potential of smart specialisation in order to construct competitive industries and world-class clusters. The challenge is not only to make sure that well-developed smart specialisation strategies are being adopted in the Member States and regions but also to make sure that synergies are being developed in practice. Emerging bottom-up dynamics generated by smart specialisation must interlock with other EU-wide platforms and initiatives.

The Commission has made available €80 billion in Horizon 2020 Programme to finance investments into innovation, and at least 50% of this budget is directly relevant to industry. In addition, with the new multiannual financial framework for 2014-2020, regions can also use at least €100 billion of European Structural and Investment Funds (ESIF) to finance support for industry and SMEs, in line with their smart specialisation strategies.

The Commission also suggests the creation of collaboration platforms for the matchmaking of SMEs wishing to integrate into world-class clusters aiming for excellence and cross-European value chains. Regional and industrial policy can be combined to create Smart Specialisation Platforms in the six priority areas: advanced manufacturing, key enabling technologies, clean vehicles and transport, bio-based products, construction and raw materials and smart grids. The idea is to help regions roll out smart specialisation programmes, assist in combining different available instruments, facilitate contacts between firms and clusters, as well as access the latest technologies and market opportunities.

For clusters, the Commission plans to launch a new measure for “Cluster animated projects for new industrial value chains” under the “Innovation in SMEs” section in the Industrial Leadership part of Horizon 2020. This action aims at promoting and supporting innovation activities of SMEs — including value chain innovation — through the facilitation of cross-sectoral and cross-border collaboration.

Finally, the Commission will propose a comprehensive approach to anticipation and facilitation of industrial change. This will include measures at regional level to minimise social impacts and help modernise the industrial base.

Extract from the press release on the Industrial Policy Communication of 22 January 2014

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The European Council hinted at it during its latest meeting but we will devote a large part to it during the Council of February next year. Council more particularly dedicated to industrial competitiveness. In fact, we did more than just “hinting at it”, even if the terminology “smart specialisation” was never used. Indeed, we decided:

- to better focus EU funds on common societal challenges. Be it ageing, energy and food security or clean transport;
- to better align public - meaning also regional - and private investment decisions to leverage growth;
- and to help in the setting up of cross-border and European-wide clusters and networks.

All these measures are linked with smart specialisation. As “knowledge needs” and “skills” also are. And this whichever industrial sector we are looking at. To pursue an active smart specialisation policy, to enable firms, regions and countries to build sustainable competitive positions in world markets and to participate in the global value chains, we need to set up what I could call a “collaborative model”. A model bringing all stakeholders together. Stakeholders of several disciplines and stakeholders of both the private and the public sectors.

Extract from the speech on the High Level Event “Regions as motors of new growth through smart specialisation” 8th of November 2013
Dear Mister President Van Rompuy,

We, political leaders of the regions associated in the 'Vanguard Initiative for New Growth through Smart Specialisation', share with the European Council the analysis, ambitions and objectives for a European Industrial Renaissance. There is a need to drive a new innovation-driven growth path for Europe with a central place given to the industry of the future. Efforts to stabilise and boost economic growth across Europe depend on this.

Our proposals are shaped as a 'Vanguard Initiative' because we are convinced that leadership and strong partnerships are needed to achieve this ambition. Our political engagement to position the smart specialisation agenda at the centre of the EU's drive for new growth is based on a firm belief that entrepreneurship and common policy goals that respond to societal challenges will provide the impetus for revitalised European industrial growth.

This Vanguard Initiative has its foundations at the regional level. EU regions are the closest policy link to the bottom-up growth dynamics necessary for the renewal of our industrial fabric through their proximity to place-based innovative partnerships and clusters. Such partnerships and clusters form eco-systems that are the catalyst for new fast-growing innovative SMEs. They can re-shape industrial structures which are vital for new growth. Regional innovation ecosystems can and do develop solutions for the grand societal challenges while delivering on the EU’s ambitions for improved international competitiveness.

The political leaders of the Vanguard Initiative are advocates of a strong multi-level collaboration to support the growth of such eco-systems. Generating critical mass which stems from a focused approach to interregional cooperation is essential for competing successfully on an international scale.

To this end, the regions taking part in this Vanguard Initiative are committed to the application and embedding of Smart Specialisation principles in our approaches to regional innovation. We believe that smart specialisation can serve as a coordination mechanism for our common efforts to foster structural renewal in Europe on the basis of each region's competitive strengths. Prioritising public resources for innovation and industrial renewal is an essential ingredient for this. Smart specialisation strategies provide the necessary impetus for re-focusing priorities through public-private partnerships that exploit the entrepreneurial opportunities within and across EU regions.

The Vanguard Initiative for New Growth through Smart Specialisation' seeks to better position and embed the smart specialisation agenda within relevant EU policy frameworks through the following activities:

- Matching strategic roadmaps between regional, national and European policy levels in support of European priority areas for the future of industry, in particular those that are identified in the Industrial Policy Communication of October 2012. Vanguard Initiative regions are committed to developing joint roadmaps for building critical mass and complementary specialisations in these emerging industries.

The political leaders of 15 European industrial regions gathered on 30 January 2014 in Brussels to engage in a joint effort for the industrial future of Europe. The ‘Vanguard Initiative for New Growth through Smart Specialisation’ supports the wider application and visibility of smart specialisation principles with the aim of boosting EU competitiveness and future growth. This regional engagement anticipates the forthcoming debate on competitiveness and industrial policy in the European Council, prepared by the Communication of the European Commission of 22 January 2014 ‘For a European Industrial Renaissance’. The proposal in this Communication to set up ‘Smart Specialisation Platforms’ with the aim of helping regions to roll out smart specialisation programmes for industrial renewal is well-received. This Letter expresses the readiness of the political leaders of the partner regions to generate new and enhanced forms of interregional collaboration in priority domains for the future of industry in Europe.

Letter to the President
of the European Council

Engagement for a European Industrial Renaissance
• Aligning strategic investments, arising from these roadmaps, in order to open new industrial pathways via flagship projects such as demonstrators and pilots identified in the European priority areas. Vanguard Initiative regions are committed to combining their resources with European investments in these focus areas.

• Upgrading regional partnerships and clusters with global potential, which are identified in smart specialisation strategies, to European world-class clusters that can compete globally. Vanguard Initiative regions are committed to internationalising their cluster initiatives in cross-border and interregional networked European clusters and partnerships.

A joint initiative for the renaissance of industry in Europe requires multi-level political leadership which highlights common goals, while promoting a bottom-up entrepreneurial drive for value-creation. The smart specialisation Vanguard Initiative is committed to ensuring greater visibility and stronger positioning of smart specialisation principles and practice in the EU governance for an industrial renaissance. The regions that have strong industrial ambitions and smart specialisation strategies for an innovation-driven structural renewal can make a difference.

Therefore the smart specialisation Vanguard Initiative welcomes the proposal of the European Commission to combine regional and industrial policy tools to create Smart Specialisation Platforms to help regions roll out smart specialisation programmes, connected to the task forces for the six strategic areas. This offers significant potential for effective governance of joint efforts.

The smart specialisation Vanguard Initiative seeks to lead by example in developing interregional cooperation and multi-level governance for supporting clusters and regional eco-systems to focus on smart specialisations in these priority areas for transforming and emerging industries. These regions wish to build the synergies and complementarities in smart specialisation strategies to boost world-class clusters and cluster networks, in particular through pilots and large scale demonstrators. These investments will bolster the competitive capacity of Europe to lead in new industries for the future and develop lead-markets that offer solutions for our common challenges. To this end, the political leaders of the smart specialisation Vanguard Initiative commit themselves and call upon all political leaders to join and support this initiative for new growth.

The undersigned EU regions are committed to the development of a unique partnership for growth, which is ready to act as a strategic dialogue partner in supporting and influencing related EU policy and would welcome the exchange of ideas at Council, Parliament and Commission levels.

ASTURIAS
Javier Fernández,
President

BADEN – WÜRTTEMBERG
Dr. Nils Schmid,
Vice-Minister President and
Minister of Finance and Economics

EUSKADI
Iñigo Urkullu,
President of the Basque Country

LOMBARDIA
Mario Melazzini,
Regional Minister for Productive Activities, Research and Innovation

MALOPOLSKA
Marek Sowa,
Marshal of the Małopolska Region

NORDRHEIN–WESTFALEN
Hannelore Kraft,
State Premier of North Rhine-Westphalia

NORTE
Emídio Gomes,
President of Norte Regional Coordination and Development Commission

OBERÖSTERREICH
Michael Strugl,
Minister of Economic Affairs

REGION SKÅNE
Pia Kinhult,
First Governor

RHÔNE-ALPES
Jean-Jack Queyranne,
President of the Rhône-Alpes Region

SCOTLAND
John Swinney,
Cabinet Secretary for Finance Employment and Sustainable Growth

TAMPERE REGION
Harri Jaskari,
President of the Regional Board, Council of Tampere Region

VLAANDEREN
Kris Peeters,
Minister-President of the Government of Flanders

WALLONIE
Jean-Claude Marcourt,
Vice-president

ZUID-NEDERLAND
Theo Bovens,
King’s Commissioner for the Province of Limburg
In Short

THE VANGUARD INITIATIVE FOR NEW GROWTH THROUGH SMART SPECIALISATION.

WHAT – a vanguard initiative of political leaders of regions that commit to the future for industry in Europe supported by smart specialisation, via the development of multi-level European investment and cluster initiatives for emerging and transforming industries, in line with the awaited debate on European industrial policy in the European Council.

WHY – need to deliver on jobs and growth and foster global competitiveness by innovation-driven investments in strategic priority domains for Europe's industrial future (with a focus on new pilot activities).

WHO – regions with strong industrial ambitions and smart specialisation strategies for their structural renewal (beyond the ex-ante conditionality)

HOW – by sharing information and acting collaboratively, in developing common roadmaps and multi-level approaches to stimulate investment and enable local clusters to connect and to develop into world-class clusters

WHEN – initiated to influence the European Council in March 2014 and future investment opportunities in priority areas for the future of industry in Europe.
Background note

The Vanguard Initiative ‘New Growth through Smart Specialisation’ is a political initiative of EU regions that are committed to playing an active role in multi-level governance for the renaissance of industry. In order to support a new industrial growth initiative for Europe they intend to lead by example in interregional collaborations on the basis of smart specialisation.

This Open Letter of the Vanguard Initiative for New Growth through Smart Specialisation to the President of the European Council aims to contribute to the policy debate at the European Council about the role and operationalisation of new European industrial policies at the start of the new European programming period 2014-2020.

The political leaders of the partner regions in the Vanguard Initiative will meet on 30 January 2014 to sign this Letter and discuss the implementation of policy proposals with invited representatives from the European Commission.

THE AMBITIONS OF THE VANGUARD INITIATIVE

The ambitions of the Vanguard Initiative New growth through Smart Specialisation, expressed in its letter to the European Council, are to initiate a fresh, bottom-up approach towards European innovation and industrial policies, to lead by example in developing interregional cooperation and to work towards a better combination of support instruments.

A fresh approach to new industrial growth

Smart specialisation has emerged as an important strategic principle in the development and operationalisation of the EU 2020 strategy. It is used for the development of regional smart specialisation strategies in the context of the cohesion policy and also for the alignment of cohesion policy with research, innovation and industrial policies to promote structural change, competitiveness and new growth.

The ambition of the Vanguard Initiative ‘New Growth through Smart Specialisation’ is to promote a more effective coordination of industrial and innovation policies in Europe in which the regions, their smart specialisation strategies and the bottom-up industry driven partnerships can play an important role in driving new industrial growth. Importantly, the Vanguard Initiative is based on an overarching commitment to drive a fresh approach for European innovation-driven industrial growth, based on developing greater coherence and alignment between bottom-up entrepreneurial dynamics for place-based innovation (in the regions) and top-down leadership for offering common perspectives (through EU policy). Enterprises and regional clusters need effective coordination of European, national and regional instruments to foster new industrial growth.

The smart specialisation Vanguard Initiative has embraced a set of five guiding principles to support and focus the efforts of the partnership on the level of a more effective coordination of European industrial and innovation policies to foster new growth:

- a common vision based on the need for a renaissance of industry;
- the driving force of ‘entrepreneurial discovery’ to identify new growth opportunities;
- the unique role of smart specialisation in providing a co-ordination mechanism for innovation and industrial policies at regional and EU levels;
- the guidance by common European priorities for co-creation of European lead-markets;
- the mutual alignment of smart specialisation strategies and European strategies for renewed EU competitiveness, jobs and growth.
These five guiding principles for designing an effective governance architecture are described below.

Firstly, the political leaders of the regions and the European Council share the analysis, the vision and objectives for a new future of industry in Europe, because industrial activities remain a pillar of our welfare model, competitiveness and strategic autonomy.

Secondly, the foundation of new policy approaches for real structural change is the bottom-up ‘entrepreneurial discovery process’ in which the actors in local eco-systems identify the smart specialisations of their regions in the global value chains and establish international networks for cooperation. This leading principle of smart specialisation is a clear departure from an old style industrial policy based on ‘picking winners’. Therefore the promotion of strategic cluster platforms and public-private partnerships, that are business-driven, have become a cornerstone in smart specialisation strategies to foster this self-discovery process.

Thirdly, genuine smart specialisation strategies are increasingly interconnected because smart specialisation operates as an implicit coordination mechanism on the basis of (future oriented) comparative advantages. The success of the European-wide eco-system for the renaissance of industry is built on the success of specialised and complementary regional eco-systems that use the synergies of co-investment and co-creation for enabling European lead-markets.

Fourthly, the direction and speed of change are dependent on the capacity of policy makers to identify common objectives, based on our common challenges. Pro-active industrial policies at European level can offer such guidance. Therefore the priority domains for the future of industry in Europe that have been identified in the Industrial Policy Communications of the European Commission, are an important reference point for co-investment strategies. In times of limited resources, a limited number of technology areas, predicted to have the highest growth potential have been identified, where benefits will have a large spill-over effect on other sectors.

Fifthly, the mutual alignment of regional smart specialisation strategies and of European, national and regional strategies for the promotion of new industrial growth requires to be embedded in strategic cluster policies, which mobilise regional comparative advantages and identify international opportunities and partnerships. Political leadership in setting priorities will leverage the international positioning of regional clusters in European world-class clusters.

Leading by example: three priorities

The partners in the Vanguard Initiative New growth through Smart Specialisation share the ambition to be a frontrunner in new European industrial growth initiatives and to lead by example. The regions are the policy level that is the closest to understand and nurture the bottom-up dynamics of smart specialisation, but achieving systemic changes – which penetrate all policy levels – depends on appropriate success criteria. The implementation of the transition path in Europe towards a new industrial future requires a collaborative approach, leading to joint efforts and matching of resources. Therefore the Letter to the President of the European Council advances three proposals to develop a multi-level governance for new industrial growth initiatives:

1. **Aligning strategic roadmaps**
   The way forward to foster synergies in action is to organise a more systematic ‘matching’ of roadmaps among regions and between regional, national and European levels. The partners of the Vanguard Initiative are committed to exploring the opportunities for complementarity, together with other regions and the European Commission. Specific support structures have to be designed in a multi-level governance architecture to ensure the most efficient way of coordination, and eventually to build common (interregional) roadmaps of scale and scope.

2. **Aligning strategic investments**
   Smart specialisation seeks to avoid fragmentation of efforts by unnecessary duplication and generating sub-critical investments in research,
innovation and industrialisation. As such, 'regional strengths' must be defined in a wider EU context. Smart Specialisation also seeks to overcome the 'lock-in' in traditional industrial structures with limited growth potential and to focus on scaling-up the emerging EU growth industries. The collective efforts of the regions involved in the Vanguard Initiative will be necessary to support this transformation. The partners in the smart specialisation Vanguard Initiative are convinced of the role of pilots, test facilities, living labs and large-scale demonstrators. The partners will explore interregional alignment of investments in common roadmaps. Long-term financing for supporting private as well as public-private investment strategies (i.e. via EIB/EIF) in up-scaling the technological and business models is a key component in the multi-level governance of the instruments for new industrial innovation policies.

3. Upgrading regional clusters into world-class clusters

The internationalisation of regional innovation strategies starts by positioning the individual regions in a European and global competitive context and prioritising efforts in this broader framework. Regional approaches to generating knowledge spillovers via cluster platforms must be aligned in cross-border as well as interregional networks of cluster nodes where economies of scale and of scope will generate world-class European clusters that can compete effectively on a global playing field. Therefore a multi-level European strategic cluster policy has to take shape. This requires a better combination of instruments at all policy levels and across policy domains to foster the strategic capacities and internationalisation of cluster platforms in the priority domains for the future of industry. These instruments can support the construction and implementation of strategic roadmaps and investment strategies for industrial growth in key areas.

The Vanguard Initiative aims to lead by example to implement a fresh approach to industrial growth that is based on smart specialisation strategies for structural change. It is by nature open to all regions and therefore an important new policy learning approach for EU-regions working on their smart specialisation strategies and developing comparative advantages in line with EU-ambitions for growth.

Towards a better combination of support instruments

The collective efforts of the regions involved in the smart specialisation Vanguard Initiative can harness new momentum to address EU innovation and industrial policy ambitions and make a unique contribution to the EU’s competitiveness and growth agenda. Combined with the proposals for Smart Specialisation Platforms, as outlined in the Commission’s Communication for a European Industrial Renaissance, there is significant potential for the Vanguard Initiative to support EU efforts in carving out a new path for growth.

The regions of the smart specialisation Vanguard Initiative are committed to developing collaborative approaches based on joint efforts and the matching of resources. This will involve joint investments to develop interregional projects and demonstrators of scale within and across EU sectors / niches of competitive advantage, and in line with EU priorities. The proposed Smart Specialisation Platforms will assist this process as an emerging ‘architecture’ to bring together common interests and specialisations in a way which is currently difficult to activate and thereby foster the emergence of world-class clusters.

EU (and national and regional) policies must facilitate this process, e.g. through funding for networking and capacity building to support such endeavours; financial instruments such as Fund of Funds to combine investments in priority areas of EU strength. Supporting the growth of regional clusters to world-class clusters and promoting competitiveness and jobs requires the effective combination of support instruments across institutional levels.
Europe 2020 Strategy and Flagships: Industrial policy, Innovation Union, Resource efficiency, Digital Agenda, New skills for new jobs...

Priority areas for lead markets & emerging industries; KETs & societal challenges

EU tools and impulses:

Roadmaps: European Innovation Partnerships, European Technology Platforms, Public–Private Partnerships, Industrial Policy Task forces and smart specialisation platforms...

Cooperation tools, notably for clusters: Horizon 2020 (Clusters projects for new industrial value chains), COSME (Clusters Go International, European Strategic Cluster Partnerships), Joint Technology Initiatives, EIT, INTERREG

Investment and co-investment support: Horizon 2020 (IDEI Collaboration projects, Financial instruments, Demonstrators and pilots, first market application projects, ERA-Net plus, PPP, JTI, joint programming, public procurement, International Cooperation), COSME Financial Instruments, EIB/EIF, Structural Funds

Regional ecosystem

Building European World-class clusters in emerging industries through Smart Specialisation and inter-regional collaboration

Matching roadmaps

Building cooperation

Investment projects

Implementing common roadmaps based on shared goals and strategy => achieving critical mass at EU level and global competitiveness through EU collaboration
Next steps

The political leaders of the Vanguard Initiative New Growth through Smart Specialisation are gathering on 30 January to consolidate their common views on smart specialisation as a key driver for new growth in the regions and in Europe as a whole, by signing the Letter of Engagement for the Renaissance of Industry in Europe, addressed to the European Council.

They will also communicate their policy proposals to all European institutions and engage in further debates with representatives of the European Commission and the Cabinets of the Commissioners that are driving the new growth policies, for a further co-development of a fresh approach towards European industrial and innovation policies, based on smart specialisation.

Therefore a central theme at the debate on 30 January will be the implementation of the ‘Smart Specialisation Platforms’ in the field of industry, proposed in the Communication of the Commission of 22 January, to support companies and clusters to align their roadmaps towards common European priority areas. This is in line with the ambition of the Vanguard Initiative to engage the regional partnerships and clusters for the future of industry in Europe. The Vanguard Initiative welcomes the proposal for Smart Specialisation Platforms to support the multi-level architecture for the Task Forces for the six priority domains and looks forward to working with Commission services in advancing this initiative, in support of new growth.

The Vanguard Initiative intends to monitor the progress in the European industrial policies, and in particular the results of the debate in the European Council of March, in perspective of its engagement for an alignment of efforts.

The Vanguard Initiative also looks forward to welcoming new regions to join our partnership, with the aim of enhancing efforts for inter-regional collaboration, guided by Smart Specialisation principles. Activities will be focused on implementing the three priorities outlined above (aligning strategic roadmaps, aligning strategic investments and upgrading regional clusters into world class clusters).

The smart specialisation Vanguard Initiative is not an exclusive initiative but wants to be relevant for all regions that share an ambition ‘new growth through smart specialisation’. It is ready to engage in policy learning and in concrete actions with all regions for aligning smart specialisation strategies and to cooperate with the initiatives of the European Commission, such as the S3 Platform, to diffuse best practices.
Leading by example: cases of interregional cooperation

1. Silicon Europe
2. Smart and Sustainable cities
3. Bio based mega cluster
4. Clustrat
5. The international Iberian Nanotechnology Laboratory (INL)
6. World eu cluster initiative in renewables and sustainable energy international (reina)
7. DanuClus - Danube Cluster Networks
8. Solliance
9. Scotland- Collaborating in Life Sciences and Renewable Energy
10. Development Strategy Of Southern Poland
11. European Region Danube Vltava (ERDV)
12. Mpower EU
13. European Diagnostic Clusters Alliance (EDCA)
Silicon Europe

A European cluster alliance for energy-efficient ICT

Silicon Europe is a Regions of Knowledge-project funded by the 7th Framework programme (2012-2015). It gathers the technological expertise and resources of Europe’s leading players in micro- and nanoelectronics: Silicon Saxony (Saxony, DE); Minalogic (Rhône-Alpes, FR); High Tech NL (East & South Netherlands, NL); DSP Valley (Flanders, BE); me2C (Carinthia, AU). Rhône-Alpes, East & South Netherlands and Flanders are also part of the Vanguard Initiative for new growth through Smart specialisation.

For these five regions, collaborating and combining innovative strength is compulsory to secure industrial production in Europe in this highly competitive sector. Key enabling technologies such as micro- and nanoelectronics are indeed the basis for the future industry. Therefore, Silicon Europe project focuses on promoting of micro- and nanoelectronics (as Key Enabling Technology for the traditional industry, unlocking new solutions for the major societal challenge on energy efficiency), securing European know-how for Europe (using inter-cluster synergies and complementarities) and opening new markets (and boosting competitiveness especially of SMEs by improving innovation and technology transfer from research to market, and by developing an internationalization strategy inside and outside Europe). It does so by mapping the existing clusters, describing a SWOT analysis and – as a result of these – developing a Joint Action Plan ready for implementation.

INTERREGIONAL COOPERATION, THE STAIRWAY TO REACH CRITICAL MASS

This type of project is really important for the cluster to reach a critical mass which will allow them to be competitive at the global level. Silicon Europe is creating a cluster of clusters which represents more than 800 companies and research institutes and forms a European alliance with access to the most advanced technologies and expertise in all fields of microelectronics applications for Energy-efficient ICT. All of the players in European microelectronics – research, industry and administration – need to join their forces. The vision for the future of microelectronics in all its traditional sites needs to be backed not only by national players but also on a European level. This goes hand in hand with sound R&D initiatives on EU and the national level that help accelerate development and support the SME dominated microelectronics industry in realising innovations they can hardly finance individually.

Therefore, interregional collaboration through multilevel governance can drive the industrial renewal in Europe. Smart specialisation strategy can increase complementarity aligning roadmaps and investments to create clusters with global potential able to conquer new markets. Also, the transfer of innovations from research to the market needs to be supported. Currently, too few of the leading-edge research results are being made into marketable products. This “valley of death” needs to be bridged. In this field, flagship projects financed by the European Union such as pilot lines or large scale demonstrators must be fostered. They are the solution to make it happen!
Smart and Sustainable Cities

Innovation Collaboration between Skåne and Tampere

The collaboration between Skåne and Tampere, both regions participating in the Vanguard Initiative, has only started, but is firmly based on corresponding focus of their respective smart specialisation strategies. The starting point is the joint commitment to promote new and emerging sectors of industry and industry-supporting services through open innovation. The aim is to co-operate and where interesting to co-ordinate present and future innovation activities within the area of smart cities and to align regional, national and European funding for joint work. The regions have been active partners in developing the strategic innovation agenda of the Baltic Sea Strategy and will work jointly with national authorities to ensure that efforts are aligned. The area of smart and sustainable cities is also prioritised on the European level and future activities involve further European partnerships through European funding and engagement in the European Innovation Partnership. A shared commitment for value creating international collaboration is one of the key drivers of the collaboration.

Both regions have leading roles in national ecosystem oriented innovation initiatives. The collaboration therefore includes a number of partners in a triple-helix-setting within both regions. The national agencies responsible for allocating money to these innovation platforms, Finnish national innovation agency Tekes and the equivalent Swedish agency Vinnova, are active partners in the collaboration and also in developing the innovation agenda of the Baltic Sea Strategy. The work started in 2013 with an ambitious mapping of collaboration fields and will develop with practical projects in 2014.

Sectors where co-operation will start include sustainable city development, ICT, logistics, media and health and will be targeting horizontal innovation policy-development, in particular:

- Innovation ecosystem development for smart and sustainable cities
- Capabilities and models for driving systemic innovation (innovation procurement, platforms and demonstrations)
- Collaboration in developing resilient cities and regions, innovation network development and leveraging existing connections between the regions (e.g. Demola open innovation platform and biobank collaboration),

and industry-related projects within the area of smart cities:

- Mobility and smart transport demonstrations and working practices (e.g. ITS applications and public transport)
- Big data as a tool for citizen engagement in sustainable development, smart transport and industrial internet (both as research topic and for implementation)
- Lighting (research, procurement of innovation and demonstration/implementation of new solutions)
- Sustainable retrofitting of existing buildings /city districts
Bio based mega cluster

Flanders, North Rhine-Westphalia and the Netherlands

Flanders, the Netherlands and North Rhine-Westphalia are currently working on a cross border mega cluster on bio based materials. The three regions are situated next to each other and are already strong actors in the field of bio based materials.

This ARRRA cluster (Antwerp-Rotterdam-Rhein-Ruhr-Area) would be the largest chemical complex in the world in a single swoop, having competitiveness pillars. Industry within this cluster already counts for 40% of the production of chemicals in the European Union and expectations predict it to even increase by 2030-2050. This mega cluster is ideal to move towards a smart specialisation in chemistry based on new resources as biomass and C1 (CO2) and on innovative molecules (via for instance bio-aromatic molecules).

This cross-border cooperation initiative aims on workable and ready to implement industrial systems to address the most relevant societal challenges of raw material scarcity and climate change. The use of so far neglected resources to produce high-volume energy carriers and platform chemicals as well as added-value special and fine chemicals such as biopolymers and biopharmaceuticals will be explored. The initiative comes with an overall improved feedstock efficiency thus securing and constantly improving the status of the involved regions as Europe’s primary industrial mega cluster. Inherently it contributes to global climate protection by reducing greenhouse-gas (GHG) emission.

This initiative targets on the complete use of various regional resources of carbon – whether its primary origin is the region itself (e.g. agro- or forest-based biomass) or whether it is consigned to regional recycling in the sense of cascade use (e.g. municipal waste, industrial side streams including waste gases as CO- and CO2-emission).

Flanders and the Dutch provinces of Noord-Brabant, Zeeland and Zuid-Holland are already cooperating in a cross-border cluster on bio based materials called ‘Bio Based Delta’. This cluster is specialized in bio-aromatics, or in a more general sense, platform molecules, based on which specialty chemicals are produced. These partners also cooperate in the Interreg project Bio Base Europe, Europe’s first open innovation and education center for the biobased economy. Flanders and the Southern Netherlands provinces have joined forces to build state-of-the-art research and training facilities to speed up the economic growth, innovation capacity, and sustainable development of our society. Bio Base Europe consists of the Bio Base Europe Pilot Plant and the Bio Base Europe Training Center. The collaboration between the Netherlands and Flanders is managed at the Flemish side by FISCH (Flanders Innovation hub for Sustainable Chemistry).

North Rhine-Westphalia has its own biotechnology clusters called BIO.NRW and CLIB2021. North Rhine-Westphalia has helped biotechnology develop into an important innovative economic sector in Germany in recent years. The majority of biotechnology patent applications in Europe currently originate from North Rhine-Westphalia. BIO.NRW and CLIB2021 foster cooperation between researchers, developers, investors and politicians on the state, national and international level. On the one hand the activities of CLIB2021 concentrate on industrial biotechnology; on the other hand there is also BIO.NRWred focusing on humans and used to develop alternative solutions to medical problems and issues in diagnosis to therapy.

The Dutch province of Limburg, although not being part of a bio based cluster yet, has some promising developments in this field in cooperation with partners from North Rhine-Westphalia. The Aachen-Maastricht Institute for Biobased Materials (AMIBM) is focusing on research in order to ‘spin’ biopolymers into fibres. The AMIBM vision is to provide the missing links between fundamental, applied and translational research in the field of biobased materials, by changing the relationship between the production of biobased materials and the value chain. This could be of mere interest for e.g. the healthcare sector.
CluStrat

Boosting innovation through new cluster concepts in support of emerging issues and cross-sectoral themes

CluStrat is a transnational cooperation project implemented within the CENTRAL EUROPE Programme 2007-2013 co-financed by the European Regional Development Fund. CluStrat has started in October 2011 and will run for three years. The consortium convenes 18 partners plus associated institutions from Austria, the Czech Republic, Hungary, Germany, Italy, Poland, Slovenia, Slovakia and Ukraine.

CluStrat is coordinated by Steinbeis-Europa-Zentrum, in close coordination and with financial support from the Ministry of Finance and Economics of Baden-Württemberg. The consortium is composed of regions, regional and national public authorities, cluster associations, business and regional development agencies, innovation agencies and technology parks, clusters and a chamber of commerce. From the Vanguard Initiative, next to Baden-Württemberg also organisations from Upper Austria and Silesia are involved.

CluStrat aims to support the anticipation and exploitation of emerging industries whose distinct feature is that they cannot be served by one industry alone, but in fact require a cross-fertilization of different industries, technologies and services (manufacturing + other industries + non-industry branches). The focus is on: Active and Healthy Ageing, Sustainable and Intelligent Mobility and Green Economy / Sustainable Development. In addition, CluStrat looks at cross-cutting issues including technology transfer, internationalization and gender in innovation.

The main objective of the project is the development of new cluster concepts for implementing the above cross-fertilization through cross-sector cluster collaboration and other forms of cluster-based innovation partnerships, applying a systemic and demand-driven approach. These new concepts shall be transferred into a joint strategy for Central European innovation policy makers in favour of enhanced framework conditions for innovation at the interface of traditional and emerging industries, technologies and services.

Emerging industries call for smart and complex solutions. This presents a chance for European regional economies to strengthen their position in international competition. The application of key-enabling technologies in the more traditional sectors, including their use in manufacturing (internet of things etc.) is a key capacity in this respect, and a promising path for European regions to deploy their given strengths towards innovative products, services and business models.

CluStrat assesses the specific potentials of the involved regions, and tests ways for deploying them. The partners implement pilot actions to experiment new models for bringing together systemically different competencies in favour of new solutions – taking account of the given strengths of the respective regions as well as complementarities between them. The new cluster concepts include new forms of regional and cross-border cluster cooperation, preparing the ground for new transnational innovation value chains.
The International Iberian Nanotechnology Laboratory (INL)

AN IBERIAN JOINT-VENTURE

The Iberian Nanotechnologies Laboratory (INL) is a large scale state-of-the-art infrastructure dedicated to applied research in nanotechnologies located in Braga and bearing an international legal status resulting of the co-ownership by the Portuguese and Spanish Governments. This is a joint and ambitious project devoted to research on nanomedicine, environment monitoring and food control, nanoelectronics & energy and nanomanipulation, which are particular relevant for manufacturing industry.

INL is a result of a strategic agreement between two European regions, Norte and Galicia, and has a common governance model with shared responsibilities. This agreement made possible the creation of a 30 M euros single sited infrastructure, mobilizing different funding sources (Cross-Border Cooperation Programme, Regional Operational Programs and National Budgets), which is already running.

Although INL is a result of a bold cross-border cooperation initiative, it has an international scope and has established important collaborations with other European regions through institutions like Université Joseph Fourier - Grenoble I, Technical University of Denmark, iNano-Aarhus, Max Planck Institute for Chemistry - Gottingen, Max Planck Institute for Colloidal Chemistry - Potsdam, Max Planck Institute for Microstructure Physics – Halle, and also across the world with institutions like MIT and Texas – Austin University.

The INL campus is set in a 47.000 m2 area of land and the built area represents about 26.000 m2, that comprises advanced special installations and several laboratories with state-of-the-art equipment, that is planned for 200 researchers and 100 PhD students.

THE FOUNDATIONS FOR INTELLIGENT EUROPEAN COOPERATION

As a general purpose technology, nanotechnologies can lever productivity and innovation in a wide spectra of sectors, with particular relevance for industrial applications, aiming to boost the regional competitiveness of companies, universities and technological centres. This investment has established the foundations for intelligent cooperation, becoming INL a focal point of nanotechnologies dedicated research infrastructures across Portuguese and Spanish regions. In fact, the constitution of INL was based on a new paradigm of interregional cooperation that aims to combine the cognitive and productive bases of the different regions, in an integrated process of construction of collective advantages.

Smart Specialisation can contribute to better identify the complementarities and commonalities among regions, since all of them are using this paradigm to devise their strategy and have a clear perception of their respective competitive positioning. In this case, it can facilitate the definition of a common and complementary research agenda, the development of synergies and the avoidance of duplications, hence improving the efficacy of the innovation policy.

The efficacy of the policy is also dependent on adequate coordination mechanisms that are able to combine different funding sources and create incentives to lever upon the results on transeuropean projects, maximizing the exploitation of the knowledge created as well as the effect of spillovers.
World eu cluster initiative in renewables and sustainable energy international (REINA)

JOINT CLUSTER SPECIFIC STRATEGIES
TO SUPPORT EUROPEAN SME'S INTERNATIONALISATION

REINA is a cooperation project already executed that has involved directly three European regions, Basque Country, Upper Austria and Ostrobothnia (FI), being two of them Vanguard Regions at the moment. It is a cross-over project in a manufacturing sector such as energy which has defined shared strategies in different target markets for different renewable energy segments while implementing the international model developed by the European Cluster Alliance through a three phase approach: energy market screening, definition of tailored internationalisation strategies and strategies deployment. Specifically, it has addressed as worldwide target markets Brazil, Mexico, Chile, North America and North Africa and as energy segments, wind sector, transport and distribution of energy, biomass and solar sector. The philosophy behind the project has been a shared interregional scope led by a regional authority with competence in competitiveness policies, the Basque Ministry of Economic Development and Competitiveness.

PREPARING THE EUROPEAN ENERGY INDUSTRY TO COMPETE IN INTERNATIONAL HIGH GROWTH MARKETS

Interregional collaboration in this case has served well for paving the way of European products and technologies in global markets by adding critical mass to individual approaches. The intensification of the international profile of the three participant regions achieved by the shared focus has strengthened the position of the clusters to support the internationalisation of their companies.

For achieving this positive effect, it is important that the three participant regions share competitiveness strategies and policies in specific business domains that allow the alignment of resources and instruments in a joint effort. The regional smart specialisation strategies permit a clear knowledge of areas of special interest and support in each region that makes possible for the clusters the seeking of complementarities among the particular interests of their companies.

This practical approach has been key for the pursuing of tangible outcomes. The project has faced highly motivated companies towards internationalization, companies that have shown interest in being involved throughout the project processes and expressed the importance of the cluster organizations to support joint internationalization activities. The project approach has been well appreciated because companies consider that the impact of the activities accomplished has increased because they have been developed in a coordinated way as part of a strategy of European clusters to support the internationalization of its members.

This project is a clear example of how instruments for competitiveness policies at regional level such as clusters can leverage the potential of their activities through interregional cooperation, joining forces to overcome challenges for addressing global markets, complementing capabilities and multiplying the impact of their actions.
Clusters in the Danube Region (DR) are diverse. There are roughly 3 groups of clusters in the DR: mature, stable, innovative (AT, DE); maturing, but potential for increased innovative capacity (HU, SK etc); lacking funds/political backing/cluster management skills with little focus on innovation, but mainly focus on export (RO, BG etc). DanuClus attempts to cater to their different needs in order to support cluster development in the whole DR and thereby increase competitiveness and prosperity. Therefore a cooperation platform of cluster managers, cluster experts and representatives of administrations responsible for cluster and innovation policies will prepare different projects in DanuClus: innovation projects combining existing strengths with a cross-sectoral and challenge-based approach, cluster management training and cluster optimization, exchange of best practices in the region, as well as strategic cluster networking projects etc.

The participants of the PA8 Working Group “Clusters of Excellence” have participated in the preparation process and will be partners in the initiative. These partners come from Germany (Baden-Württemberg), Croatia, Czech Republic, Slovakia, Hungary, Serbia, Bulgaria and Romania. Also Slovenia, Bavaria, Bosnia, Moldova and Montenegro have been informed about the initiative. DanuClus is aiming to include regional and national partners from all 14 countries of the EUSDR. Furthermore, also the OECD committed itself to taking part. Upper Austria is lead partner in DanuClus.

CROSS-BORDER SMART SPECIALIZATION OF CLUSTERS FOR EMERGING INDUSTRIES

The participating clusters will be integrated in a network that does not stop at borders so that they have access to the brightest minds in the whole region. Thereby they will increase their innovation capacity with the goal to create better products and to become visible as strong economic actors within Europe as well as globally, by offering solutions to today’s grand societal challenges and by actively taking part in the formation of emerging industries.

In the preparatory phase, the working group already identified priority economic sectors in the Danube Region with activity of top clusters which are most ready for international cluster cooperation. These sectors range from traditional industry to emerging issues such as the service industry. In innovation projects, new ideas will be born through cooperation across these economic sectors.

As many clusters in the Danube Region have similar strengths as clusters in their neighbouring countries, the strategic development of DanuClus will be focused on determining and developing the niche strengths of these clusters in order to use the benefits of smart specialization, complementarities and synergies, to avoid duplication and competition, and to create cross-border value chains. With a coordinated approach based on smart specialization using clusters as multipliers, every country’s economy stands to gain.

Clusters are traditionally embedded in a regional or national setting. With the support of a European-level approach to smart specialization, the clusters of the Danube Region will be able to enhance their role in emerging industries. In order to ensure the success of such a multi-level approach, DanuClus and its involved clusters will benefit from funding from these three levels.
Solliance:
“one-stop-shop for thin film PV”

*Only excellent players can play a major role in the rapidly expanding world of photovoltaics. Solliance’s research partners – ECN, TNO, Eindhoven University of Technology, Holst Centre, imec en Forschungszentrum Jülich – all have major strengths in the field of thin film PV. The joining of forces in Solliance creates focus and critical mass.*

Solliance aims to be active in the entire value chain, and be in close contact with players at all levels. It aims to put the Eindhoven-Leuven-Aachen (ELAT) region, in which all six players are based, on the map as a world player in the field of thin film PV. 250 researchers are working together to realise this ambition, and engage themselves through the Solliance alliance to produce synergy among the region’s strong players: industry, research institutes, and universities.

The close cooperation with industry is aimed at both fulfilling short-term needs of industry, and conveying promising lines of mid- and long-term research. For its three principal themes (thin film Si, Copper Indium Gallium Selenide (CIGS), Organic PV (OPV)) it is constructing baselines that facilitate direct answers to the industry’s most pressing questions. Its research stretches across the entire field, from fundamentals of materials science to sophisticated production technologies.

The presence of a university in the alliance assures a continuous influx of highly trained researchers into the region’s ecosystem.

Tasks ahead range from fundamental research in materials science at universities and research institutes, to development of high-throughput production technology, design of high-precision production equipment, and testing and monitoring of devices and systems. The presence of solar cell producers in the region adds to the ecosystem because of direct feedback. In five years’ time, Solliance aspires to be the principal supplier and partner to important industrial parties in Europe and abroad; with a technological portfolio that reflects the priorities of the sector’s champions.

Solliance answers to social challenges and industrial needs by coordination of R&D programs. Solliance aims to bridge the gap between development and deployment of new technologies (materials, products, equipment). It functions as a platform for research institutes and industry and coordinates their agendas, primarily among themselves but as a spin-off also towards governments. In so doing, it positions itself as the main counter for industry and government in the field of thin film PV. Through common use of existing lab facilities, coordination of investments in new infrastructure, and the erection of a completely new lab, it has the focus and critical mass needed to be a world player.

At the same time, Solliance judges flexibility to be of the essence. In order to create mutual commitment with its industrial partners, it strives to build up its R&D facilities through co-investments and collaborations in specific thin film technologies. Solliance’s research will focus on technical and economic feasibility on a scale optimal for understanding and resolving bottlenecks (like stability) and on the development of crucial sub processes like nano-imprinting, in-line deposition, and laser treatment. It will seek industrial support for process integration and development of high-throughput production systems on an industrial scale.

[www.solliance.eu](http://www.solliance.eu)
Scotland- Collaborating in Life Sciences and Renewable Energy

Scotland has a thriving, highly collaborative and networked life sciences community which underpins an international reputation for science and innovation. It is home to a diverse life sciences community which encompasses a variety of different components, including pharmaceuticals, contract research, healthcare, medical research, medical technology, translational medicine, and animal and plant sciences, along with internationally recognised research institutes.

In February 2013, Scotland's life sciences sector played a key role in securing almost €200 million in the Innovative Medicines Initiative, the world’s largest public private partnership in health. A European 5-year public-private partnership, comprising 30 EU partners spanning academia and industry, it is the first pharma life sciences partnership of its kind, pooling the best resources from across Europe to work in collaboration with seven large pharma companies. The ELF programme is a radical new 'open innovation' approach to drug discovery which aims to deliver accelerated development of new drugs for a broad range of diseases.

http://www.europeanleadfactory.com/

HyTransit - is a €24 million public-private partnership to demonstrate the EU’s largest integrated hydrogen transport project. As a Joint Undertaking, the project links research, technological development and demonstration activities, paving the way for the commercial use of hydrogen fuel. With industrial partners from Belgium, Germany, UK and Denmark, Aberdeen City Council - the main public sector partner - will host the main demonstration element of the project. Scotland’s strengths in hydrogen fuel research and development support EU ambitions for renewable energy resources and the decarbonisation of the transport sector and contribute to the commercialisation of hydrogen buses in Europe.

A follow-on FP7 project – the High VLo-City – will facilitate the building of a network of Centres of Excellence on fuel cell bus integration in different public transport fleets. These projects also connect to a North Sea Programme project (through Interreg IVB) which focuses on the development of infrastructure, technology, skills and financial instruments that support the application of hydrogen based technologies across the North Sea Programme.

http://www.fch-ju.eu/project/european-hydrogen-transit-buses-scotland

The European North Sea Energy Alliance (ENSEA) is a €2.9 million project delivered in partnership between Scotland, Lower Saxony, Northern Netherlands and the Stavanger/Rogaland region. Its aim is to increase the competitiveness of research-driven energy clusters through better coordination and exploitation of research, focusing on the key challenge of integrating an increasing proportion of renewable energy into the energy system. The project is expected to generate closer working across a trans-national North Sea cluster and to further boost EU innovation potential.

www.ensea.biz
Development Strategy of Southern of Poland: Macro cooperation of Małopolska and Silesia

Status: running cooperation

Partners: 2 regions involved

Sectors concerned: manufacturing + research and development + environment + infrastructure

Main objective: This strategic document was jointly adopted on 5 April 2013 and adopted by the national government on 8 January 2014. The document defines the possibilities of cooperation between regions of Małopolska and Silesia and indicates directions, types of projects and initiatives that develop and strengthen this cooperation. It is a unique approach of cooperation in Poland. Starting from 2013, the cooperation will be implemented through common policy and shared projects and investments. Special focus is driven towards investments co-funded via structural funds and economic growth based on regional smart specializations. Within the strategy 3 main objectives were defined:

1. Transforming the Upper Silesian-Cracow area into a trend setting Euro-pole with high concentration of innovation and creativity, an active member of network of the most dynamically developing European metropolises. Focus on: R&D + smart specialization

2. Southern Poland – a space of the partnership for the effective use of development opportunities.

3. Southern Poland a place that attracts people, entities and initiatives to strengthen the capabilities of the macro-region.
European Region Danube Vltava (ERDV)

7 Regions, 7 Thematic Focal Points, 7 Know-How Platforms

On June 30, 2012, the European Region Danube Vltava – ERDV was found as a cross-border association between 7 districts and regions of Austria, Germany and the Czech Republic.

PARTNER REGIONS
The ERDV partner regions are the Austrian regions Lower Austria and Upper Austria, the Bavarian districts of Lower Bavaria and Upper Palatinate (including the county of Altötting), the Czech districts of Southern Bohemia, Plzen, and Vysočina.

OBJECTIVES
The objective is to achieve joint economic growth and provide the ERDV with an international profile as a competitive economic region located between the cities of Vienna, Bratislava, Prague, Munich and Nuremberg. By their trilateral cooperation, the partner regions want to shape the ERDV as a dynamic region with a future for the people, an attractive living and working environment as well as a strong partner of European policy.

7 THEMATIC FOCAL POINTS OF REGIONAL COOPERATION
In the preparation phase of the ERDV a detailed network and potential analyses of this geographical area were established and discussed on political and administrative levels as well as with intermediaries and economic stakeholders.

CONSIDERING
- the results of analyses and discussions,
- the framework conditions of the European growth strategy ‘Europe 2020’ with its 3 priorities (smart, sustainable and inclusive growth) and 7 flag ship initiatives (innovation, education, digital society, climate, energy & mobility, competitiveness employment & skills, fighting poverty) and
- the 11 priority areas of the European Strategy for the Danube Region – EUSDR

the 7 partner regions adopted the ERDV strategy that specialize on 7 thematic focal points. The 7 themes are treated in 7 knowledge platforms. Each knowledge platform is headed by one of the 7 regions and consists of a pool of 30 experts who develop concepts relevant to implementation and successful bottom-up project approaches.
KNOWLEDGE PLATFORM FOR
‘COMPANY COOPERATION AND CLUSTER’ LED BY UPPER AUSTRIA

Coordinated by the state of Upper Austria the knowledge platform ‘Company Cooperation and Cluster’ started work at the beginning of 2013.

A close cooperation between business, science and politics has been established. There is a high concentration of technology-based companies and close networking within and among clusters. These experiences are now to be used at the trilateral level.

The experts nominated from all seven regions within the ERDV are using their expertise and experience to fill the knowledge platform with content and to act as multipliers within the trilateral network of the European Region Danube-Vltava.

The main areas of action of the platform are:

- Removal of barriers that hinder the development of cross-border cooperation
- Harmonization of regional innovation and cooperation funding esp. for small and medium-sized companies
- Development of cross-border cooperation clusters
- Improved access to qualified staff
- ERDV internationalization

www.europeanregion-danube-vltava.eu
MPower EU

Future Internet Innovation and Entrepreneurship Ecosystem for Manufacturing SME EmPowerment in Europe

BASQUE COUNTRY, LOMBARDIA, BADEN- WÜRTTEMBERG, SOUTHEAST NETHERLANDS

In a period where production processes need to increase productivity and reduce costs, ICT enablers and Future Internet technologies can make European industries more competitive. The Public Private Partnership “Future Internet” (FI PPP), commonly promoted since 2011 by the European Commission and the business sector, has developed numerous ‘building blocks’ of new technology. In its last phase (2014-2016) the FI PPP will give selected SMEs and web entrepreneurs access to this database of internet technologies in order to build further on them and develop new applications and services for the benefit of companies and citizens.

A consortium of partners from 4 Vanguard regions (Basque Country, Lombardia, Baden-Württemberg and Southeast Netherlands) has submitted its candidature to be one of 20 consortia in the EU to mobilize ICT companies and provide them with grants to develop new innovations.

The "MPower EU" consortium of Vanguard regions will be focusing exclusively on ‘ICT services for manufacturing companies’, to realize the ‘smart’, ‘digital’ and ‘virtual factory’ of the future. As such it wants to deliver a significant contribution to the structural renewal of the European Industrial sector.

What MPower EU will do:

• 150 companies will get a grant to work with FI,
• up to 40 companies will be able to develop a full prototype and run a test of it in manufacturing companies that will be recruited in 4 of Europe's top manufacturing regions : Basque Country, Lombardia, Baden Württemberg and Southeast Netherlands.
• All selected companies will, on top, get business and financial advice to grow and mature as a company.

ICT Companies and web entrepreneurs from all over the EU can be part of MPower EU. But they will develop applications useful for the manufacturing companies operating in the Vanguard regions. The Smart Specialisation Strategies of the four regions involved will guide the MPower EU consortium in defining the specifications for the applications-to-be-developed.

Vanguard regions will be one of the key actors of the sustainable FI ecosystem connecting EU SMEs/web entrepreneurs with manufacturing sector demand. EU funding will launch the activity, and ICT companies delivering promising results will without any doubt find future opportunities in regional and national funding, with private investors and in accelerators, and on the commercial market.

The future of manufacturing in the EU is in advanced manufacturing. ICT is key in this.

“MPower EU” will contribute firmly to this.
European Diagnostic Clusters Alliance (EDCA)

Regional clusters join forces to boost leadership of European diagnostic SMEs

Europe concentrates substantial scientific and industrial critical masses in the field of medical diagnostic. This domain covers a large range of activities, from academic research to development, production of in vitro diagnostic tests, and innovative ways to introduce new IVD technologies into healthcare. Thanks to the support of regional health clusters, public research institutes and large and small companies are now collaborating at local level to boost innovation in medical diagnostic. The trend toward personalized medicine and translational research will foster more than ever the expectations of practitioners for specific in vitro diagnostic tests helping them in guiding their treatment decisions. This trend is also impacting the (bio-)pharmaceutical industry that will have to deliver in the near future companion diagnostics to their innovative therapeutics. In this context, European actors in the medical diagnostic area have a major role to play and take the opportunity to drive their innovation through a strong networking at European level. The European Diagnostic Clusters Alliance (EDCA) is helping the European national players to become global leaders.

The initiative has originally been lead by Euromediag, the diagnostic group of Eurobiomed cluster (Languedoc Roussillon - Provence Alpes Côte d’Azur, France), and Wal-Dx, the in vitro diagnostic group of the competitiveness health cluster BioWin (Wallonia - Belgium).

They have rapidly been joined by other bioclusters: Biocat (Barcelona, Spain), Life Science Cluster Krakow (Poland), Nexxus Scotland (UK), OBN (Oxford, UK), Uppsala Bio (Sweden), Welsh Government Life Sciences Team (UK), MEDICEN (Paris, France), Lyonbiopole (Lyon, France) and ZMDB (Berlin-Brandenburg, Germany).

All together, these clusters represent more than 500 companies active in the field of medical diagnostics (mostly SMEs) and about 50 Universities having research activities in that field.

The main objectives of the European Diagnostic Clusters Alliance are:

- to underpin the competitiveness of European in vitro diagnostic players through networking and innovative partnerships;
- to ease and fasten access to non-EU markets (especially North America and Asia);
- to harness the premium role of medical diagnostic in the health care practice.

The European Diagnostic Clusters Alliance is helping to identify and connect the “hot spots” of medical diagnostics players in Europe. Members are focusing their partnership on fostering innovation through collaborative R&D projects and technological platform shares. Within these perspectives, cross-fertilization between different technological fields is strongly encouraged.

More information on www.edc-alliance.eu
Partnership regions

I. Asturias
II. Baden-Württemberg
III. Euskadi
IV. Lombardia
V. Małopolska
VI. Nordrhein-Westfalen
VII. Norte
VIII. Oberösterreich
IX. Region Skåne
X. Rhône-Alpes
XI. Scotland
XII. Tampere Region
XIII. Vlaanderen
XIV. Wallonie
XV. Zuid-Nederland
   (Limburg, Noord-Brabant & Zeeland)
Asturias is a maritime region located in the North of Spain that has been traditionally an industrial leading region. Industrial culture, diversification, adaptation to technological changes, a growing infrastructure of advanced services and opening into external markets, are all points defining Asturias economy.

Along with the traditional industrial sectors (metals like steel, zinc and aluminum, energy and agro-food) there are activities related to the development of new products in new materials (nanomaterials), chemical industry and milk and dairy products. Shipbuilding together with maritime transport and logistics connected to the ports of Gijón and Avilés will be crucial for the development of a new and open economy.

One of the main challenges that Asturias is facing through its Smart Specialization Strategy is the recovery of its industrial leadership. To do so, Asturias counts on the new materials and advanced manufacturing sectors, the diversification of energy production, and the biotechnologies applied to agro-food and health industry. All these strengths will be the basis for the creation of synergies, value chains and sustained competitive advantages.

An important pillar for the future of Asturias industrial sectors is the territorial cooperation among industrial clusters and companies from different European territories. Asturias is a territory open to cooperation. Asturias has participated in several INTERREG IVC projects acting as leaders in some of them; the region is also member of three ERA-NETs in manufacturing, materials and marine energies, and is also part of Networks like CPMR, EURADA, Chemical Regions Network and the European Clusters Alliance.

“Asturias is an industrial region open to cooperation.”

President
Javier Fernández

### GENERAL

- **Country:** Spain
- **Region’s capital:** Oviedo
- **Population** (2011): 1,077,360
- **GDP/cap** (2010): 21,310 euro
- **R&D-intensity** (GERD/gdp) (2011): 0.43%

### INDUSTRY

- **Employment industry** (2011): 54,019
- **Share industry gross added value** (2011): 20.98%
- **R&D-intensity IBERD/gdpl** (2011): 0.43%
In Baden-Württemberg industry and innovation are two sides of the same coin. Over 30 percent of the state’s value creation is generated by industry. And Baden-Württemberg is one of the most innovative regions in Europe with a R&D-intensity of 5.1 percent. The private sector is responsible for 80 percent of R&D expenditure. Our industrial structure is a mixture of global players and a strong Mittelstand which are well-connected. Many SMEs are “Hidden Champions” in their international markets. A core element of our policy for industrial renewal is a further fortification of our excellent R&D infrastructure. In order to remain as an internationally competitive industrial location, Baden-Württemberg is concentrating its activities on dynamic future growth areas. The state is focussing on dialogue-orientated economic policy – the interaction of politics with companies, associations, chambers, networks and clusters, academia and science, trade unions and other actors means that new stimulus is given.

The strength in innovation is a critical factor for the competitiveness of the state. Our innovative strength may help us to make an important contribution to tackle the challenges society is facing. Therefore the further strengthening of Baden-Württemberg’s innovative capacity is at the core of the intelligent specialisation of the state. Baden-Württemberg has established an Integrated Territorial Investment (ITI) competition that will reward the best proposals for a smart specialisation strategy. This competition has the advantage of stimulating integrated thinking in all areas involved in the competition.

The Four Motors for Europe which celebrated their 25th anniversary in 2013 have tailored its interregional strategy with a view to consolidating the economic, scientific and technological competitiveness of the four regions. Baden-Württemberg is an important player in the EU Strategy for the Danube Region (EUSDR), which stretches from the Black Forest to the Black Sea, including over 100 million inhabitants. Baden-Württemberg is also member of the International Lake Constance Conference and the Oberrheinkonferenz (ORK).
The Basque Country has been pursuing an innovation strategy for the last 30 years. Being nowadays considered a success story in industrial renewal, our RIS3 strategy responds to the productive and social transformations needed to generate employment and welfare.

The institutional plurality embedded in a private public collaboration scheme has been recognized as one of the unique strengths in the Basque Country. The RIS3 design has resulted from the combination of structural or functional priorities with vertical bets under the premise of increasing the economic impact of investments by transferring knowledge to the industry. Advanced Manufacturing, Energy and Biosciences have already being set as the first choice for the key priority areas for scientific, technological and industrial development.

The outward looking trend of our Science, Technology and Innovation strategies is totally aligned with the international aim of the Basque competitiveness policies. This openness has paid off in the successful engagement of the Basque Innovation System in the EU R&D programmes and our highly active participation in the ER-Anet scheme.

“...The Basque Country has been pursuing an innovation strategy for the last 30 years. Being nowadays considered a success story in industrial renewal, our RIS3 strategy responds to the productive and social transformations needed to generate employment and welfare.”

President of the Basque Country
Iñigo Urkullu

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<tr>
<td>Region's capital: Vitoria - Gasteiz</td>
<td>Share industry gross added value (2011): 23.8%</td>
</tr>
<tr>
<td>GDP/cap (2011): 30,274 euro</td>
<td>R&amp;D-intensity (GERD/gdp) (2011): 2.08%</td>
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Lombardia

“Lombardy is ready for the challenges of the future. Willing to be a leading player, the region will keep betting on research and innovation, real engines of growth and development.”

Lombardy industrial policy is in line with the S3 Strategy aiming at supporting the key areas of regional excellence. It is divided into three main areas: 1) enterprise and entrepreneurship; 2) research, innovation and technology transfer; 3) internationalization. Innovation, as crucial element of the regional action, is essential for the complex and diverse productive system in order to maintain its competitive position at global level and the stimulation of the connection between the three elements of the knowledge triangle is key for the growth and productivity of the business and knowledge system.

Lombardy Region has the goal to find paths for the growth of the territory by leveraging on the strengths and turning weaknesses into opportunities. The point of view has changed, going from a bottom-up approach - based on traditional sectors - to an horizontal approach, with a vision structured around systems of competence and expertise. The challenge is helping the productive system intercepting and seizing new market opportunities, accompanying traditional industries in the transition and specialization towards emerging industries. The resources will be concentrated on great impact projects supporting 1) innovation processes and competitiveness of traditional sectors (e.g. mechanical, chemicals and pharma, fashion, furniture, agro-food...); 2) the development of innovative and technological clusters (e.g. advanced manufacturing, energy, aerospace); 3) the transformation of productive activities, helping businesses to find new market niches and opportunities by integrating the supply chains of different sectors.

Regione Lombardia starts its active role in the interregional cooperation in 1988 with the foundation of the Four Motors for Europe whose Presidency has been taken over from Lombardy in late 2013.

Lombardy strongly believes in the cooperation among regions at EU level and it is member of several sectorial networks (ECRN, NEREUS, PURPLE, REGLEG, AREPO, ELISAN, EUREGHA, WDC)

Regional Minister for Productive Activities, Research and Innovation

Mario Melazzini

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<th>GENERAL</th>
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<tr>
<td>Country: <em>Italy</em></td>
<td>Employment industry (2011): 1,166,100</td>
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<tr>
<td>Region’s capital: <em>Milan</em></td>
<td>Share industry gross added value (2010): 24.9%</td>
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<tr>
<td>Population (2011): 9,955,100</td>
<td>R&amp;D-intensity (BERD/gdp) (2010): 0.91%</td>
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</table>
Małopolska

Małopolska is looking to foster economic growth, job creation and further development of the region through new technologies. The Vanguard Initiative will allow all participating regions to join forces and spread the benefits of innovative solutions across the European Union. Together these regions strive to transform industry through an entrepreneurial spirit and ‘smart’ attitude.

The Małopolska Region is very pleased and honoured to be among the start-up regions of the Vanguard Initiative.

The Regional Government believes that the Vanguard regions’ cooperation, based on solid smart specialisation, will breathe new life into the European Union’s industry.

Our engagement in the initiative stems from the ambition to be one of the leading regions in Europe with a knowledge-based economy and growing R&D sector. Recent years have brought an impressive growth of high-tech sectors in Małopolska. The region has become the second best ICT hub in Poland. There has been a great development of the life sciences sector with a high number of graduates in biochemical fields. Our chemical companies are among the leading players in the European industry.

Małopolska’s strong clusters of ICT, chemistry, life science, and sustainable energy can be attractive partners for the Vanguard regions. Together we can be more innovative and competitive!

Małopolska is looking to foster economic growth, job creation and further development of the region through new technologies. The Vanguard Initiative will allow all participating regions to join forces and spread the benefits of innovative solutions across the European Union. Together these regions strive to transform industry through an entrepreneurial spirit and ‘smart’ attitude.

Marshall of the Małopolska Region
Marek Sowa

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<td>Region’s capital: Kraków</td>
<td>Share industry gross added value (2011): 23.1%</td>
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<tr>
<td>GDP/cap (2011): 13,000 euro</td>
<td>R&amp;D-intensity (GERD/gdp) (2011): 1.06%</td>
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North Rhine-Westphalia as one of the leading economic regions in Europe has mastered a difficult structural change from coal and steel towards a future-oriented location for science and industry. One of the key elements for NRW’s industrial policy will be the focus on eight identified lead markets of the future, in which NRW has strength and advantages through (smart) specialization. Clusters play a very important role by supporting further development of these markets and linking the partners in the value chains. Through the focus on the lead markets – New Materials, Machinery and Plant Engineering/Production Technology, Health, Information- and Communication Technologies, Mobility and Logistics, Energy and Environment, Life Sciences, Media and Creative Industries – NRW opens up enormous opportunities for partners in the value chain while supporting technological, economic and social innovation as well as tackling global challenges.

In addition NRW is developing a technology-transfer strategy especially for SMEs, which links the focus on lead markets with a research-oriented strategy Fortschritt. NRW Fortschritt.NRW gives especially universities and other key research organisations a framework to find solutions for the grand challenges in lead markets. In the draft of these strategies as well as the combined regional innovation strategy the stakeholders were and will be involved, which will lead to a successful implementation of the strategies. This will sharpen the profile of NRW as a location for successful undertakings in industry and services as well as a location for science. Fruitful cross-innovation activities with solutions regarding resource efficiency in the industrial sector or new customer relations and business models are only a few positive examples of the smart specialization efforts of NRW.

Furthermore, NRW welcomes and supports interregional cooperation such as the "Top Technology Region – Eindhoven-Leuven-Aachen technology triangle" (TTR-ELAt) and related projects like Cross Border Cluster Stimulation (G.C.S.; www.gcs-innovation.eu) and Top-Technology-Cluster (ITC; www.ttc-innovation.eu).
Norte

"Cooperation is an imperative that needs to become intelligent, exploiting the commonalities and complementarities between European regions, in order to improve the innovation output and economic growth. Thus, we strongly believe in the forging of European Alliances and are deeply committed to actively participate in the Vanguard Initiative."

The Norte region is one of the largest and most industrialized regions in the EU. Being an export-led economy, Norte’s complex economic structure encompasses traditional industries that still represent a significant share on value added and employment, and emerging medium-high and high tech sectors, supported by the significant accumulation of Human Capital and Scientific capabilities that allowed Portugal to become the fastest performing country in the EU, according to the innovation union report.

Our smart specialization strategy is founded on exploring this human capital and the potential for crossing knowledge bases and productive capabilities within a related variety domain, where diversity creates an ecosystem that mutually reinforces competitive advantages. Our smart specialization domains include Culture, Creativity & Fashion, Agro-environmental Systems, Advanced Production Technologies, Mobility Industries and Sea Technologies, and for this reason the manufacturing industry is a cornerstone in our strategy.

The application of the smart specialization paradigm across EU regions provides an opportunity to better understand how to combine actions, ensuring multilevel cooperation and the articulation of different funding sources, thus contributing to a more efficient and effective innovation policy.

Although a large region, Norte is quite small in the global arena where Europe competes. Interregional partnerships are crucial to lever each region’s resources, to derive synergies and combine competitive advantages. Cooperation is an imperative that needs to become intelligent, exploiting the commonalities and complementarities between European regions, in order to improve the innovation output and economic growth.

Thus, we strongly believe in the forging of European Alliances and are deeply committed to actively participate in the Vanguard Initiative.

President of Norte Regional Coordination and Development Commission
Emídio Gomes

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<tr>
<td>Region’s largest agglomeration: Porto</td>
<td>Share industry gross added value (2011): 32%</td>
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<tr>
<td>GDP/cap (2012): 12,753 euro</td>
<td>R&amp;D-intensity (GERD/gdp) (2011): 1.54%</td>
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Upper Austria has a long tradition and a great deal of experience with regard to the preparation of “smart economic and cluster strategies”. The first Upper Austrian Smart Specialisation Strategy has been called the “Upper Austrian Economic and Research Programme 2000+” and ran from 1998 to 2004. Now, for the period from 2014 to 2020, Upper Austria has drafted its fourth Strategic Economic and Research Programme “Innovative Upper Austria 2020”. The primary focus of all these programmes has been and is the strengthening of the innovative and competitive capacity of business and industry, as well as thriving for additional technological leadership in intelligent market niches. Five fields of action consisting of Advanced Manufacturing, Energy, Health/Ageing, Food/Nutrition and Mobility/Logistics have been established for the latest programme on the basis of key technological competences, an innovation orientation and the fields of strength of Upper Austrian business and industry in the export area. In fact, in its Strategic Programmes, since 1998 Upper Austria has already applied the logic of the Smart Specialisation Strategy (S3), which is also currently the object of intensive promotion by the EU. From a contentual perspective, the orientation of the fields of action is directly accordant with a number of the programme lines contained in “Horizon 2020”. This does increase Upper Austria’s capacity for linkage with research policy initiatives on a European level and serves to secure compatibility with the “Europe 2020” strategy. As part of the European Danube-Vltava Regions (ERDV) and owing to its involvement in the EU Strategy for the Danube Region (EUSDR), as well as numerous other EU projects, Upper Austria is committed to interregional partnerships aimed at fostering industrial renewal and smart specialisation.

“...The “Innovative Upper Austria 2020” Strategic Economic and Research programme forms both the basis for the future prosperity of our region and an optimum response to the challenges of global competition. Growth, competitiveness and investments serve as a platform for the prosperity, security and quality of life of the Upper Austrian population.”

Minister of Economic Affaires
Michael Strugl

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<td>Region’s capital: Linz</td>
<td>Share Industry gross added value (2010): 31.5%</td>
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Region Skåne

“...Skåne has gone through major structural changes the last decade. However, there is still a strong industry base, and industry is transforming into the new service sector. Our competitive advantage lies in highly skilled engineering, and lately there have been positive indications of companies moving back from low-cost countries. Skåne has to be attractive enough to stabilize this trend! We are committed to working close to the private sector, promoting the skill-base and know-how needed and to promote even closer cooperation with academia and other relevant actors to create an innovative and truly international mind-set throughout the region.

Our smart specialization strategy; the International Innovation Strategy for Skåne identifies three areas of relative strength: Personal Health, Smart and Sustainable Cities and Smart Materials. The existence of strong clusters within life-science, clean-tech, ICT, packaging, food and mobile communication is a starting point. We work intensely to facilitate their cross-border and cross-sectorial work, to create open innovation arenas. Strong regional research communities, the planning and building of a world-class European research infrastructure in the region, as well as our perception of future major societal challenges have also been decisive for the choice of specialization.

Cross-border cooperation is a top priority on our political agenda. The Öresund collaboration is strong and manifested in the world-class life science hub of Medicor Valley. Political partnership with Denmark and northern Germany promotes discussions on joint science and development agendas. We are working closely with Swedish national authorities to implement the innovation agenda of the Baltic Sea Strategy. This has resulted in new co-operations with Finnish regions Tampere (Smart Cities) and Oulu (eHealth).”

First Governor
Pia Kinhult

GENERAL

| Country: Sweden |
| Region’s largest city: Malmö |
| Population (2012): 1,263,088 |
| GDP/cap (2010): 26,300 euro |
| R&D-intensity (GERD/gdp) (2009): 4.69% |

INDUSTRY

| Employment industry (2011): 64,000 |
| Share industry gross added value (2010): 17.7% |
| R&D-intensity (IBERD/gdp) (2009): 3.49% |
Industry matters in a territory like Rhône-Alpes, as 25% of regional employment is industrial and Rhône-Alpes is the second industrial region in France. To support its industries, Rhône-Alpes focuses its action on Investments (in research equipments and demonstrators) Innovation (collaborative R&D, user-driven innovation) and International. The regional ecosystem is mainly organized through clusters, to ensure close collaboration between researchers and industries.

In 2013, Rhône-Alpes Region has set a new Regional Innovation Strategy for smart specialisation (RI3S) with 3 objectives. The first is to improve efficiency of regional innovation ecosystem (by enabling cross-disciplinary approaches and transfer of KETs, by promoting entrepreneurship and improving Rhône-Alpes players participation in Horizon 2020). The second objective is to explore new innovation areas to provide solutions to societal challenges (by promoting user driven innovation, public innovative procurement, and social innovation). The third objective is to focus on “smart specialisation” domains: personalized healthcare; eco-efficient factory; grids and energy storage; smart building with high energy-efficiency; digital technologies and user-friendly systems; mobility systems of the future; sports, safety and infrastructures in the Alpine mountain.

In this context, in Rhône-Alpes, we think that interregional cooperation is an efficient way to get the critical mass to be competitive at the global level. Therefore, the Region has developed a long history of interregional cooperation with the other European Regions, particularly with the Four Motors for Europe (Baden Württemberg, Catalonia, Lombardy) since 1988 but also with some concrete cases like SILICON Europe in ICT and KETs with Saxony, East & South Netherlands or Flanders.

“...Regions are the right level to implement transversal and interconnected innovation ecosystems.”

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### GENERAL

**Country:** France  
**Region’s capital:** Lyon  
**Population (2012):** 6,342,000  
**GDP/cap (2012):** 30,414 euro  
**R&D-intensity (GERD/gdp) (2010):** 2.84%

### INDUSTRY

**Employment industry (2011):** 454,000  
**Share industry gross added value (2011):** 17.4%  
**R&D-intensity (BERD/gdp) (2010):** 2.84%
Scotland

The Scottish Government has set out its approach to establishing the foundations for long-term economic prosperity and the policy levers which will drive growth most effectively in its Government Economic Strategy. The Government Economic Strategy articulates the Scottish Government’s support for economic growth through a range of actions focussed on six Growth Sectors: Food & Drink; Creative Industries; Sustainable Tourism; Energy (including renewables); Financial & Business Services; and Life Sciences. These Growth Sectors are characterised by strong industry leadership, working alongside public partners in setting the ambition and direction for each sector and will help drive sustainable growth and develop a resilient and adaptable economy.

In addition to our focus on the Scottish Growth Sectors, Scotland’s has recognised strengths in Personalised Health and Care and through Scotland’s science, technology and engineering assets across all sectors. Enabling and digital technologies underpin and form an essential part of the supply chain in existing and emerging growth sectors. In addition, the creation of four Enterprise Areas - each with its clear sectoral focus to enable a targeted approach to maximising the advantages of knowledge clusters and natural resources - support our industries in the creation of new employment opportunities and stimulate private investment.

Our sustained focus on areas identified as Scottish strengths is delivering results – not only for Scotland but for our European partners too. Such co-operation is at the heart of our ambitions for growth and is evidenced through the following example.

A key partner in the European Innovation Partnership (EIP) on Active and Health Ageing, Scotland is recognised by the European Commission as a three star Reference site within the EIP through its work in addressing the challenges of active and healthy ageing - and broader societal challenges - to meet the needs of Europe’s citizens by the safe and effective use of digital technologies.

“...there is a new entrepreneurial spirit emerging in Scotland that recognises the social as well as economic benefits of innovation and collaboration. The Vanguard Initiative provides an excellent platform from which we can work with our European partners to deliver our shared aspirations for smart, sustainable and inclusive growth.”

Cabinet Secretary for Finance Employment and Sustainable Growth

John Swinney

GENERAL INFORMATION

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<tr>
<th>Country: Scotland</th>
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<tr>
<td>Capital City: Edinburgh</td>
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<tr>
<td>Population (2012): 5,313,600</td>
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<tr>
<td>GDP/cap (2012): 28,117 pound</td>
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</table>

INDUSTRY RELATED INFORMATION

| Employment (2013): 2,546,000 |
| GDP (£m) (2012): 149,401 |
| R&D-intensity (GERD/gdp) (2011): 1.56% |
| R&D-intensity (BERD/gdp) (2012): 0.59% |
Renewing the manufacturing industry is at the heart of our regional development. We will regain our position at the forefront of manufacturing regions by combining new technologies to our products and services. We will use new ways of doing things: e.g. innovation platforms, system trials, demonstrations and international co-creation. We would like to go beyond clusters and lead our manufacturing industry to post-cluster competition.

Our smart specialisation strategy focuses at creating talent and capability building and catalyzing of business ecosystems in four main fields: smart mobility, smart housing & infrastructure, industry renewal, advanced treatments and human spare parts, which rely on key enabling technologies, such as computing, signal processing, photonics, advanced manufacturing and biomedicine. New ways of innovation are developed and used to take our key industries to global market leaders.

We see interregional cooperation as an essential part of our regional development. A good cooperation example is the Tampere University of Technology led initiative BSR Manufacturing Belt, which seeks to strengthen the competitiveness of the manufacturing industry in the Baltic Sea Region countries by promoting macro-regional smart specialisation and attracting more private investments in research and innovation.

Another good example of interregional partnerships is the Tampere-Skåne collaboration, which is based on the regions’ smart specialisation strategies. We share the ambition for value creating international collaboration, concentrating on cities’ demands and developing concrete demonstrations. We will cooperate in developing the innovation capabilities and ecosystems and certain industrial sectors (logistics, health, ICT and media).

President of the Regional Board, Council of Tampere Region
Harri Jaskari

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**GENERAL**

Country: Finland  
Region’s capital: Tampere  
Population (2013): 500,006  
R&D-intensity (GERD/gdp) (2011): 7.15%

**INDUSTRY**

Employment industry (2011): 40,062  
Share industry in gross added value (2010): 38%  
R&D-intensity (BERD/gdp) (2011): 5.82%
Our ‘New Industrial Policy’ is a key project within the transition programme ‘Flanders in Action’ through which we channel our ambition to make Flanders a Top-region in Europe. It is an integrated policy of the ministers of economy, innovation and work to promote the transformation of our industry through innovation. We embrace a new approach based on entrepreneurial discovery, value chains, clusters and systemic projects in order to boost productivity. Our ‘targeted cluster policy’ is now focusing on smart specialisation. Cluster roadmaps that are drawn up by industry itself, will be supported by a toolbox of instruments to enable these new value chains.

The transformation of the industry in Flanders, is working on two axes. On the one hand, the already existing strong industrial clusters focus on tackling the new global challenges, e.g. the transition in the petrochemical cluster towards “sustainable chemistry”. The second axis focuses on the innovative power of new industries based on key-enabling technologies such as micro-electronics, biotech or new materials where Flanders has built internationally outstanding knowledge institutes such as IMEC and VIB (Flemish Institute for Biotechnology). These emerging industries provide new solutions for new challenges, e.g. in personalised health care.

Flanders is an open region. ‘Flanders in Action’ is benchmarked and related to the strategies for transformation in an international network of partner regions also outside of Europe. The so-called Eindhoven-Leuven-Aachen triangle (ELAT) has been operational for several years, by for instance pooling resources between Flanders and the Netherlands for nano-electronics research in the Holst Institute. Cooperation with the Netherlands and North Rhine Westphalia has been strengthened recently with a trilateral cross-border cluster initiative for sustainable chemistry and bio-based economy.

Minister-President of the Government of Flanders
Kris Peeters

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<tr>
<td>Region’s capital: Brussels</td>
<td>Share industry gross added value (2011): 19.5%</td>
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<tr>
<td>Population (2011): 6,351,000</td>
<td>R&amp;D-intensity IBERD/gdp (2011): 1.64%</td>
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<tr>
<td>GDP/cap (2011): 33,381 euro</td>
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<tr>
<td>R&amp;D-intensity (GERD/gdp) (2011): 2.4%</td>
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In 2005, the Walloon Government adopted its Priority Action Plan, the "Marshall Plan" which aims to boost the economy of the Region. In 2009, our priorities were confirmed and updated in a "2.Green Marshall Plan". At the heart of our strategy, the development of a new industrial policy mainly focused on the development of industrial eco-systems through an ambitious Competitiveness Poles policy.

The main objective of this policy is to reach a high level of competitiveness and international visibility in some key growth sectors (life sciences, agro-industry, mechanical engineering, transport & logistic, aeronautics & space) on the basis of strong partnerships projects between enterprises, research centers/universities and training centers. Mixing top-down and bottom-up approaches, this policy constitutes the backbone of the regional smart specialization strategy. It mixes different policy tools and fosters cross-fertilization among different industries and sectors.

Since 2009, we’ve been putting a greater emphasis on eco-efficiency and green technologies. In 2011, a 6th Pole in environmental technologies was created, and we developed a new industrial ecology action line with a view to deal with new green challenges and opportunities and foster resource efficiency. We have also concluded in 2013 a partnership with the Ellen McArthur Foundation to promote practices of circular economy (NEXT program).

Furthermore, with the Creative Wallonia Action Plan (2010), the Government fosters the transformation of regional economy through the emergence of a wide spread innovation and creativity culture in Wallonia. Cross fertilization between traditional industrial sectors and creative and cultural industries is further explored in the context of the Wallonia, European Creative District – a large-scale demonstrator project supported by the European Commission since 2012.

The international dimension is fully integrated in our industrial policy. Each Competitiveness Pole has developed an internationalization strategy. More than 30 international partnerships have already been agreed. Our Poles are involved in several European projects and networks, which allow fostering cross-border and cross-European clusters.

Vice-president
Jean-Claude Marcourt

The third industrial revolution will be based on Europe and the regions of Europe. Wallonia will totally be part of this redeployment. This redeployment is supported by sectors with high level economic potential and innovative activities.”
The Southern Netherlands is a highly innovative manufacturing region. Where its focus used to be on traditional sectors of industry (e.g. textiles, ceramics), it has today turned into a knowledge intensive high tech region. Smart specialization is a “modus operandi” since the early 90s, that will get a further incentive the Southern Netherlands’ operational programme;

The Southern Netherlands accommodate some of Europe’s most successful clusters. Two main centres of trade and industry could be identified; one in the Southeastern and one in the Southwestern part.

Southeast Netherlands’ clusters concentrate on High Tech Systems, Chemistry and LifeTec. The “Brainport 2020” vision and strategy strengthen and interconnect these top clusters and support the development of new clusters. It is a unique triple helix cooperation in which high tech research and business, facilitated by public authorities, work closely together in an open innovation ecosystem.

Southwest Netherlands is part of the Strategic Board Delta Region, which focusses on biobased, logistics and maintenance. The Strategic Board Delta Region is a triple helix partnership of business and industry, knowledge institutions and authorities. Its objective is to boost innovation (at product level as well as in working methods) by creating new networks and connections, both on a cross-sector and cross-border level. One of the leading examples is the Biobased Delta. This cluster is specialized in bio-aromatics, or in a more general sense, platform molecules, based on which specialty chemicals are produced;

The Southern Netherlands clusters cooperate with many European partners in several important interregional partnerships. Some of the most interesting ones could be found below.

- Several partners from the Southeast Netherlands cooperate in the project “MPower EU”, which focusses on future internet innovation and an entrepreneurial ecosystem to empower manufacturing SMEs.
- Flanders, Southern Netherlands (the provinces of Limburg, Noord-Brabant and Zeeland) and North Rhine-Westphalia are currently working on a cross border cluster on bio based materials.
- Partners from the Southern Netherlands cooperate with other European partners in “Silicon Europe”, a cluster alliance for energy-efficient ICT.

King’s Commissioner for the Province of Limburg
Theo Bovens

### GENERAL

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<tr>
<th>Country: The Netherlands</th>
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<tr>
<td>Region’s capital: Den Bosch/ Maastricht/ Middelburg</td>
<td>Employment industry (2012): 231,000</td>
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<td>R&amp;D-intensity (GERD/gdp) (2010): 2.3%</td>
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"No other region in the Netherlands has such a dynamic, innovative and knowledge based economy."
The Vanguard Initiative for New Growth through Smart Specialisation is open to all regions that want to make a political commitment (at the highest level) to engage their smart specialisation strategies for the future of industry in Europe.

Regions play an important role in the modernisation of the European industry through innovation. The Vanguard Initiative brings together regions that encourage innovative partnerships and clusters to internationalise through smart specialisation.

Smart specialization is an innovation policy concept explicitly aiming at boosting innovation in all European regions by focusing on their strengths. Smart specialisation strategies bring together governments, research institutions and companies at regional level to work out competitive solutions to societal challenges that are at the same time sources of new growth and jobs.

The partners of the Vanguard Initiative aim to lead by example by encouraging specialised regional clusters to grow into European world-class clusters, in the framework of European strategic priorities of Horizon 2020 and Industrial Policy. Therefore they will act collaboratively on an interregional and multi-level scale. In this way, they also contribute to European ambitions to strengthen international competitiveness.

The High-Level Meeting of 30 January 2014 in Brussels gathers political leaders of the 15 partners to sign a 'Letter of Engagement for a European Industrial Renaissance' that will be addressed to the President of the European Council. The Vanguard Initiative will follow-up on the principles and proposals developed in its Letter to strengthen interregional cluster networks in European priority areas and cooperate with the European Commission to strengthen the multi-level governance of industrial and innovation policies for new growth.

ASTURIAS | NORDRHEIN-WESTFALEN | SCOTLAND
BADEN - WÜRTTEMBERG | NORTE | TAMPERE REGION
EUSKADI | OBERÖSTERREICH | VLAANDEREN
LOMBARDIA | RHÔNE-ALPES | WALLONIE
MALOPOLSKA | REGION SKÅNE | ZUID-NEDERLAND