

Country fiche

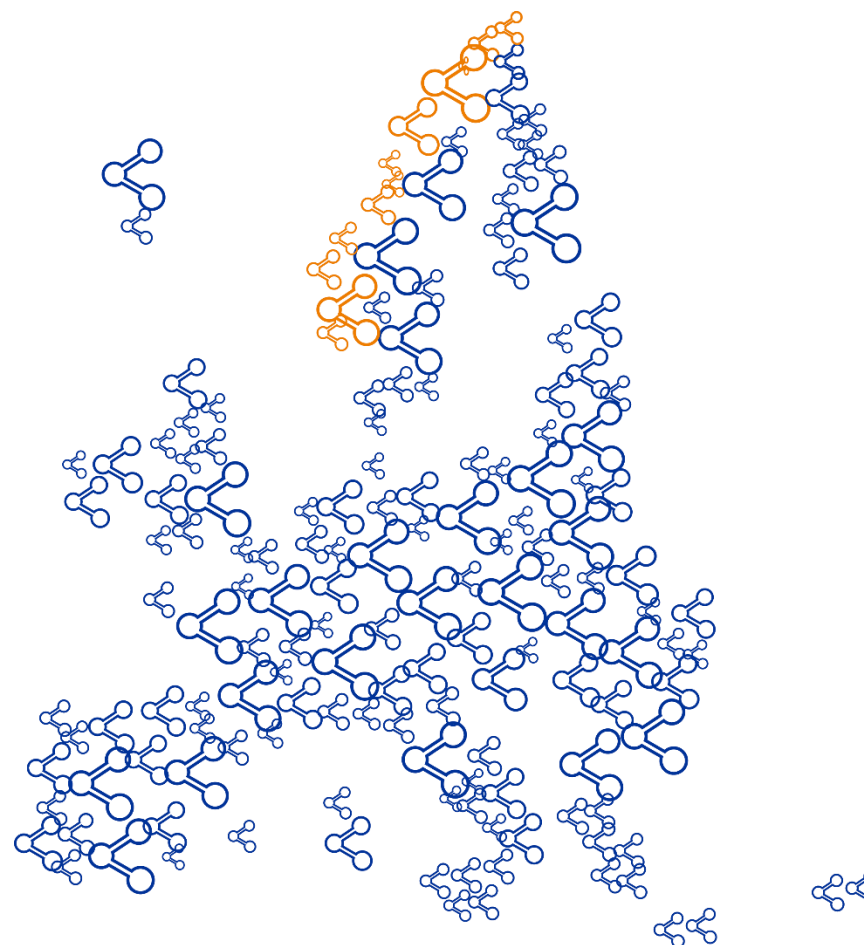
Territorial patterns and relations in Norway

Economy

Ecosystems and renewables

Territorial challenges

Interactive version: www.espon.eu/norway





Economy

Economic integration

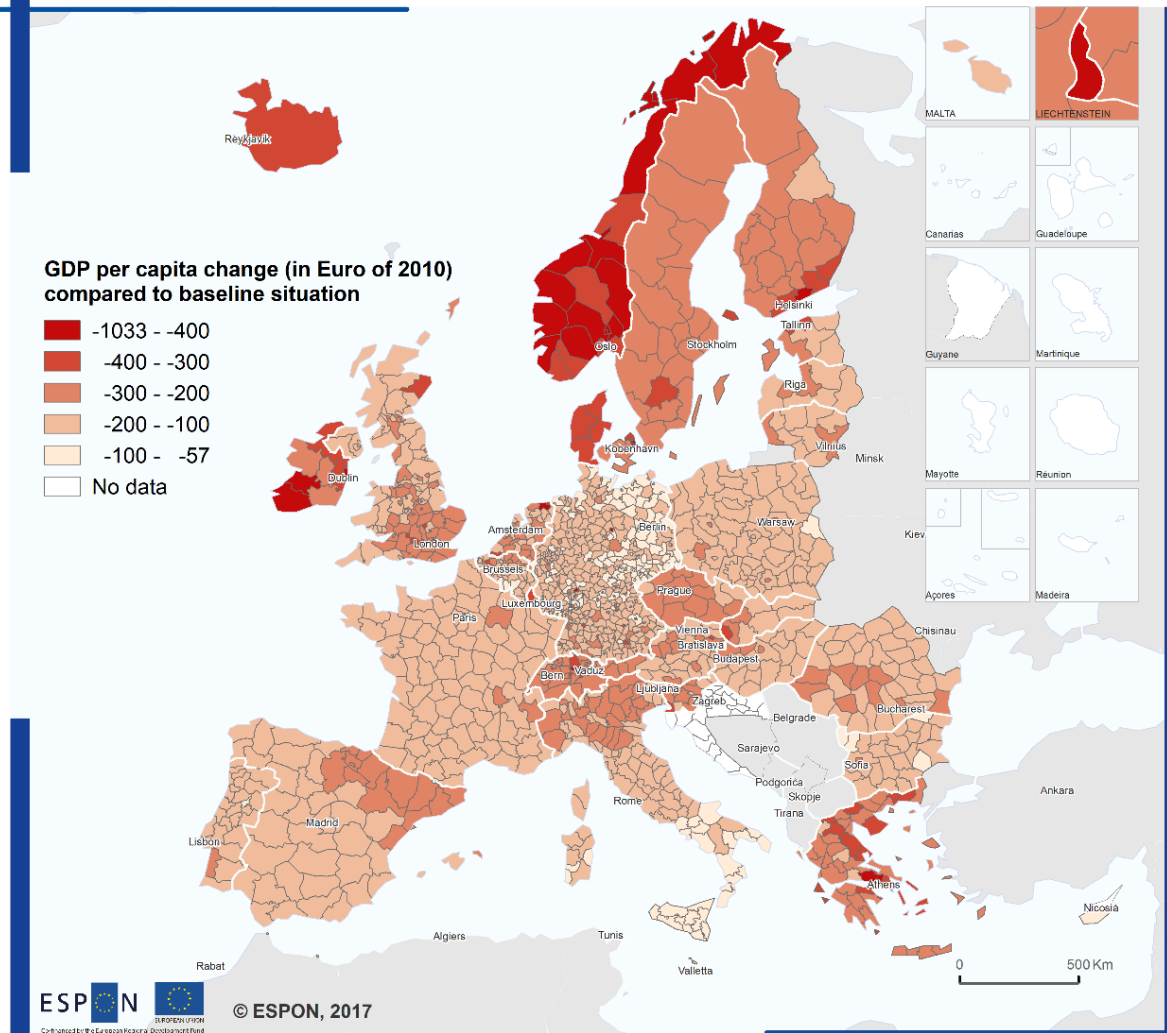
Small and medium-sized enterprises

Foreign Direct Investment

Unemployment

Knowledge economy

Tentative effects of European disintegration on GDP per capita 2030



Regional level: NUTS 3 (version 2006)
 Source: Spiekermann and Wegener Urban and Regional Research (S&W), Territorial Futures, 2017
 Origin of data: SASI Model
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Economic integration

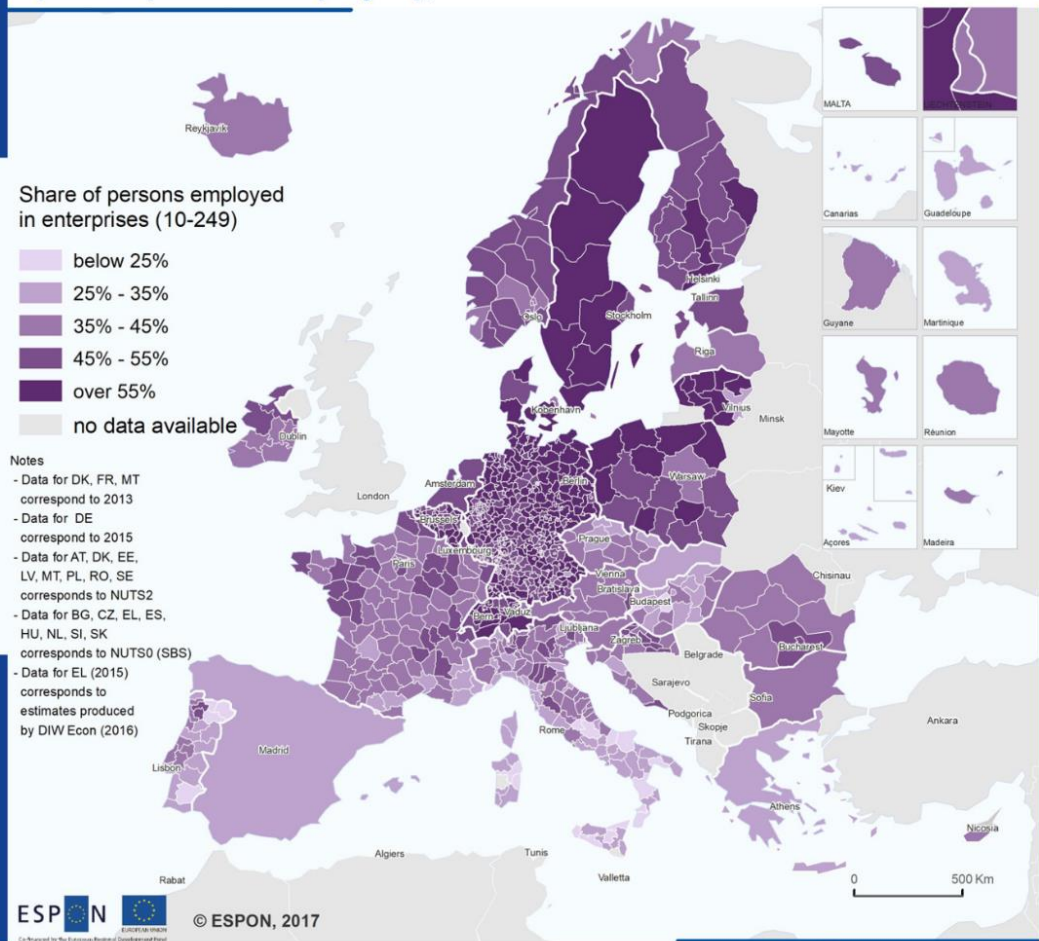


European integration has been the main trend over the past decades: the Single European Market was implemented, trans-European transport networks were developed, and political, social and cultural barriers were reduced. This integration process is also true for the relationships of the EU with non-EU countries in Europe and neighbouring countries in Africa and the Middle East.



Regions in Norway are predicted to be negatively impacted economically in a European disintegration scenario. In this scenario more political, social and cultural barriers emerge in the aftermath of events like Brexit or the refugee crisis. Although Norway will remain above the EU's baseline GDP per capita in 2030 in this scenario, it is projected that if current integration processes are halted or reversed over the next ten years Norway will lose some of its relative competitive advantage in per capita GDP.

Share of persons employed in small and medium enterprises (10-249 persons employed), 2014



Regional level: NUTS 3 / NUTS 2 / NUTS 0 (version 2013)

Source: ESPON SME, 2017

Origin of data: Eurostat Business demography, Structural Business Statistics, Statistics Austria national SBS, Statistics Belgium Demografie Ondernemingen, ORBIS, Beschäftigtenstatistik Bundesagentur, national SBS, Statistics Finland national BD, Insee, Direction des statistiques démographiques et sociales (DSDS), Financial Agency, Central Statistics Office (CSO) national BD, Statistics Iceland national BD, Amt für Statistik Fürstentum Liechtenstein - Beschäftigungsstatistik, Statistics Norway national BD, Central Statistical Office Poland national BD, Statistics Portugal Integrated Business Accounts System, National Statistics Institute Romania national SBS, Statistics Sweden Business Register, Bundesamt für Statistik Schweiz, SBA Factsheet Greece 2016
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Share of people employed by Small and Medium Enterprises

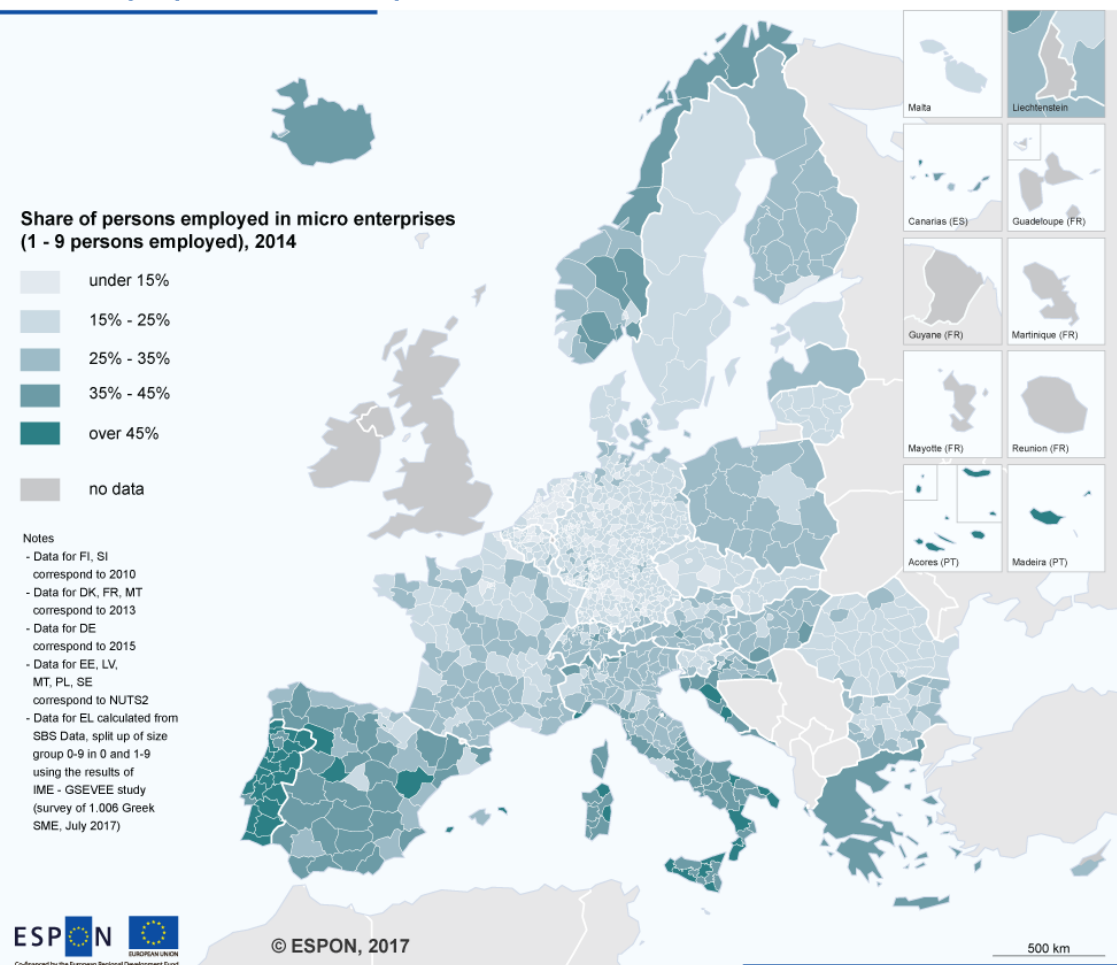


SMEs represent 99% of all businesses in Europe and play a crucial role in economic growth, innovation, job creation and social integration. SMEs account for higher share of employment in many regions in the Nordic countries and in parts of central Europe. Capital city regions in Europe show significantly lower SME employment in comparison to non-urban areas across. Iceland, Norway, the north of Germany, northern Sweden, Lithuania and sections of Poland have a high share of SMEs.



Consistent with trends in Iceland and other Nordic countries, Norway's capital region is home to fewer SMEs compared than the rest of the country. On average, between 45-55% of the Norwegian working population is employed by SMEs. Oslo, Rogaland, Buskerud, Finnmark and Akershus are the only regions with slightly lower than average share of persons employed by SMEs at around 35-45%.

Share of people in micro-enterprises, 2014



Share of people employed by micro-enterprises



Micro-enterprises (fewer than 10 employees) are among the fastest growing companies in Europe and tend to be more innovative. Creative risks however leave them more vulnerable to external economic and financial shocks. Croatia, the Czech Republic, Latvia and Estonia have experienced micro-enterprise increases since 2008, while Italy, Spain, the Netherlands and Romania have witnessed decreases.



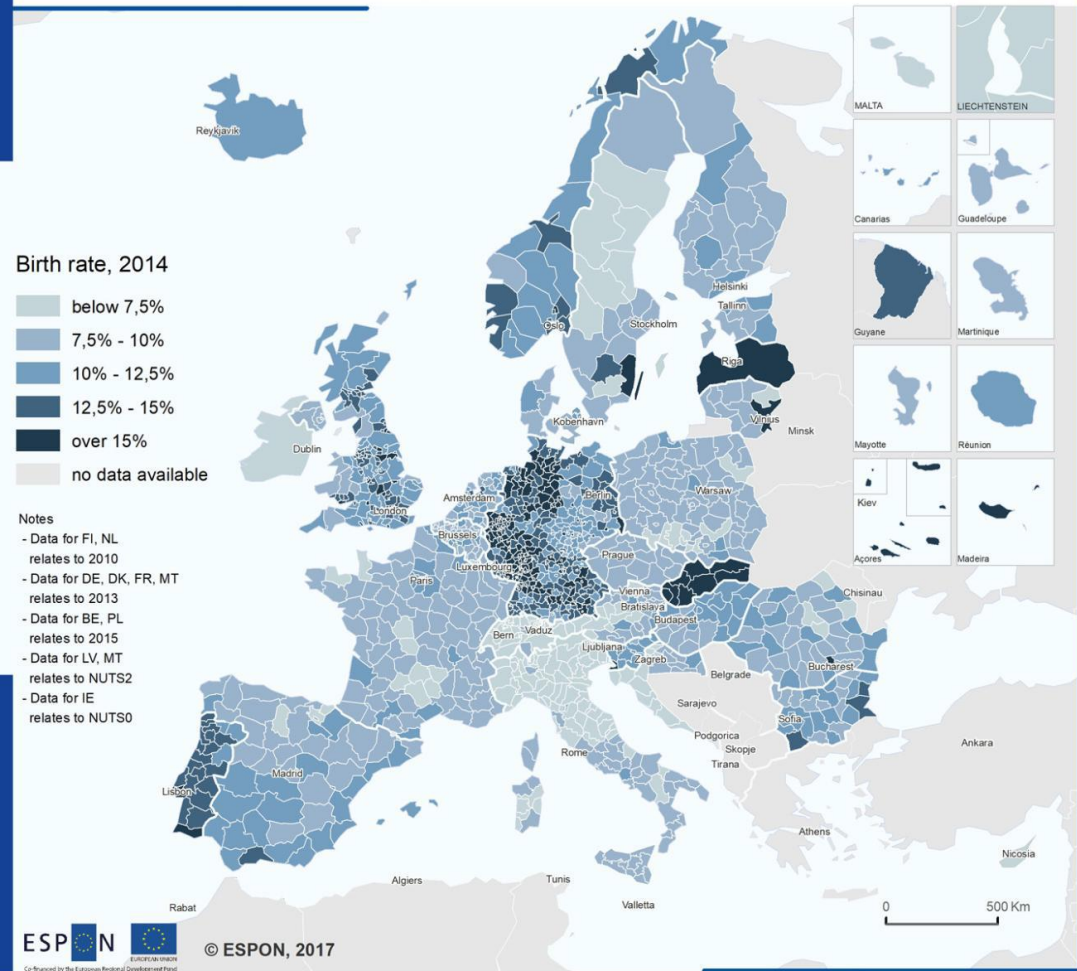
Employment in micro-enterprises is particularly strong in northern Norway (Troms, Nordland, Finnmark and Nord-Trøndelag) as well as in the central regions of Hedmark and Oppland where 35-45% of people are employed in micro-enterprises. Ostfold, Vestfold, Aust-Agder and Telemark also reveal a share of around 35-45% employment in micro-enterprises.

Regional level: NUTS 3 / NUTS 2 / NUTS 0 (version 2013 / 2010)
Source: ESPON SME, 2017

Origin of data: Eurostat Business demography; Statistics Austria national SBS, Statistics Belgium Demografie Ondernemingen, ORBIS, Beschäftigtenstatistik Bundesagentur, national SBS, Statistics Finland national BD, Insee, Direction des statistiques démographiques et sociales (DSDS), Financial Agency, Central Statistical Office (CSO) national BD, Statistics Iceland national BD, Amt für Statistik Fürstentum Liechtenstein - Beschäftigungsstatistik, Statistics Norway national BD, Central Statistical Office Poland national BD, Statistics Portugal Integrated Business Accounts System, National Statistics Institute Romania national SBS, Statistics Sweden Business Register, Bundesamt für Statistik Schweiz, Small Enterprises' Institute of the Hellenic Confederation of Professionals, Craftsmen and Merchants (IME GSEVEE)

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Birth rate, number of enterprise births divided by the number of active enterprises, 2014



SME birth rate

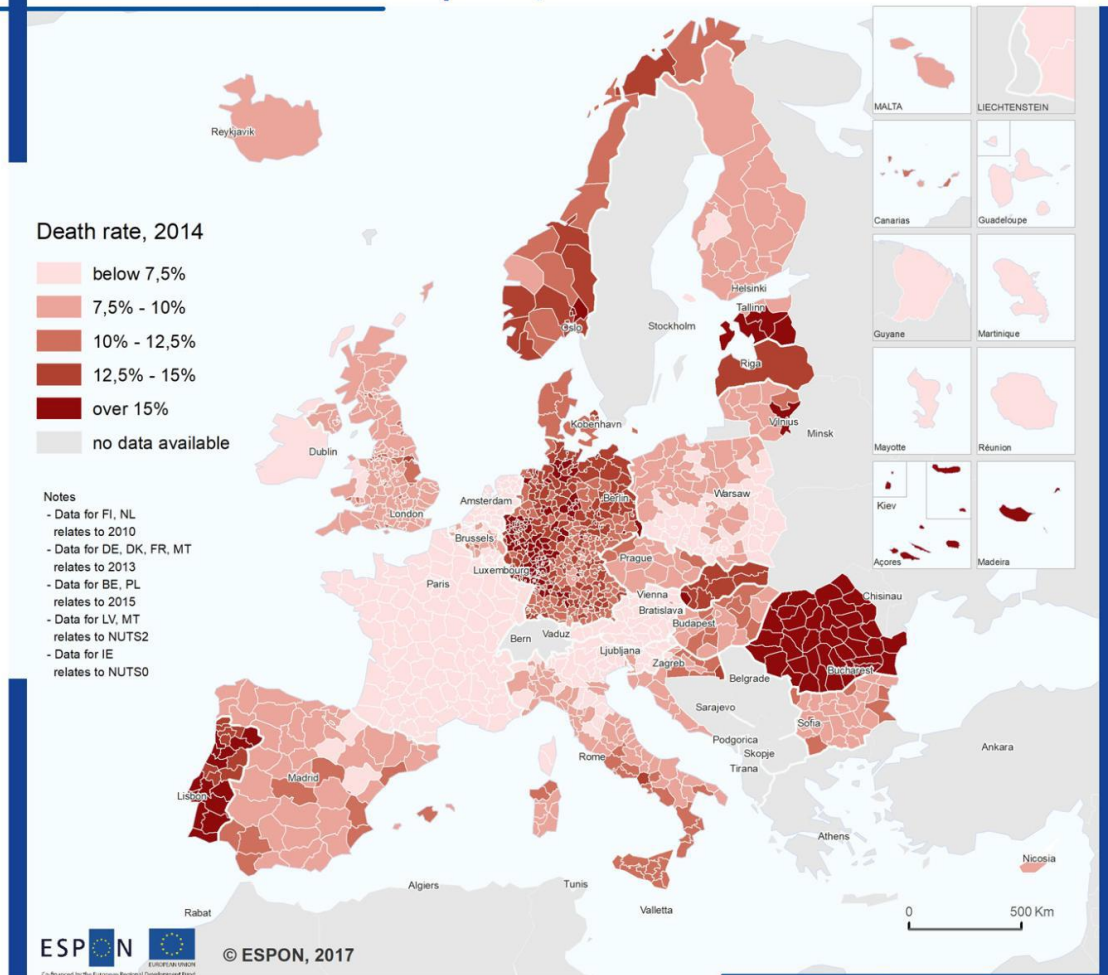


Employment in the SME sector requires good access to finance and an environment that supports growth. In areas with a greater share of FDI, SMEs have more potential to grow and survive in the long-term. Latvia and Slovakia have high SME birth rates above 15%. Most regions in western Germany and in Portugal, as well as parts of Bulgaria, Norway and the UK experience high enterprise birth rates. The Greater Stockholm region is the only area in Scandinavia with some 15% annual SME birth rate.



Norway has more small and medium enterprise births per year than any other Nordic country. SMEs have an annual birth rate of around 10-12.5% in most Norwegian territories, with a slightly higher rate above 15% in Troms, Sor-Trondelag, Hordaland, Rogaland, Ostfold and Akershus.

Death rate, number of enterprise deaths divided by the number of active enterprises, 2014



SME death rate

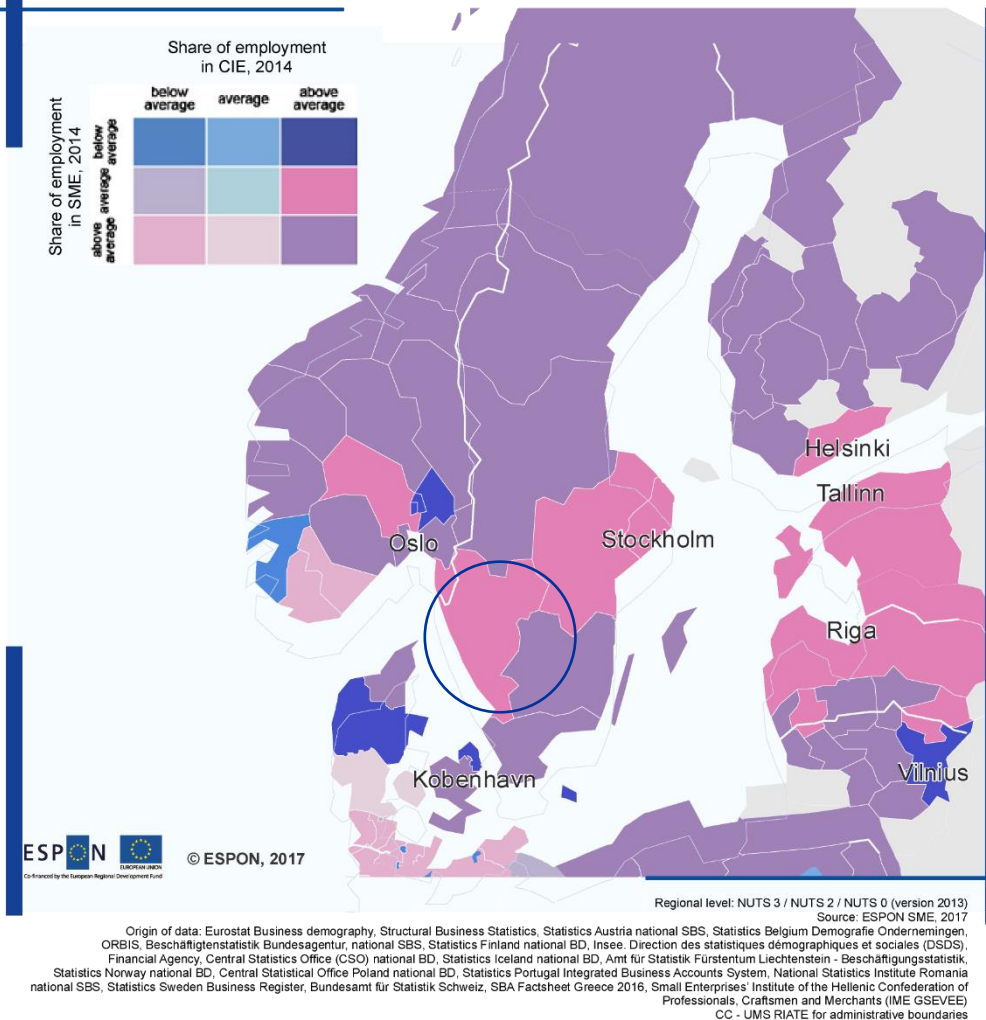


The cities and regions with the most territorially diverse economic structures show a greater resilience towards SME longevity. The 2008 financial crisis had a significant impact on the closure of many SMEs born in climates with weak economic foundations such as Romania, Slovakia or Portugal. The SME death rate is noticeably high in parts of Germany and Norway where market diversity and resilience may not be favourable to support the large competition of SMEs.



While every year a sizeable number of SMEs are established in Norway, a slightly higher number are terminated. SMEs in Sor-Trondelag, Hedmark, Buskerud, Vest-Agder, Rogaland and Hordaland have an annual death rate of around 12.5%-15%, with Oslo - Akershus registering the highest at over 15%.

Share of SME employment and share of employment in carbon-intensive economy, 2014

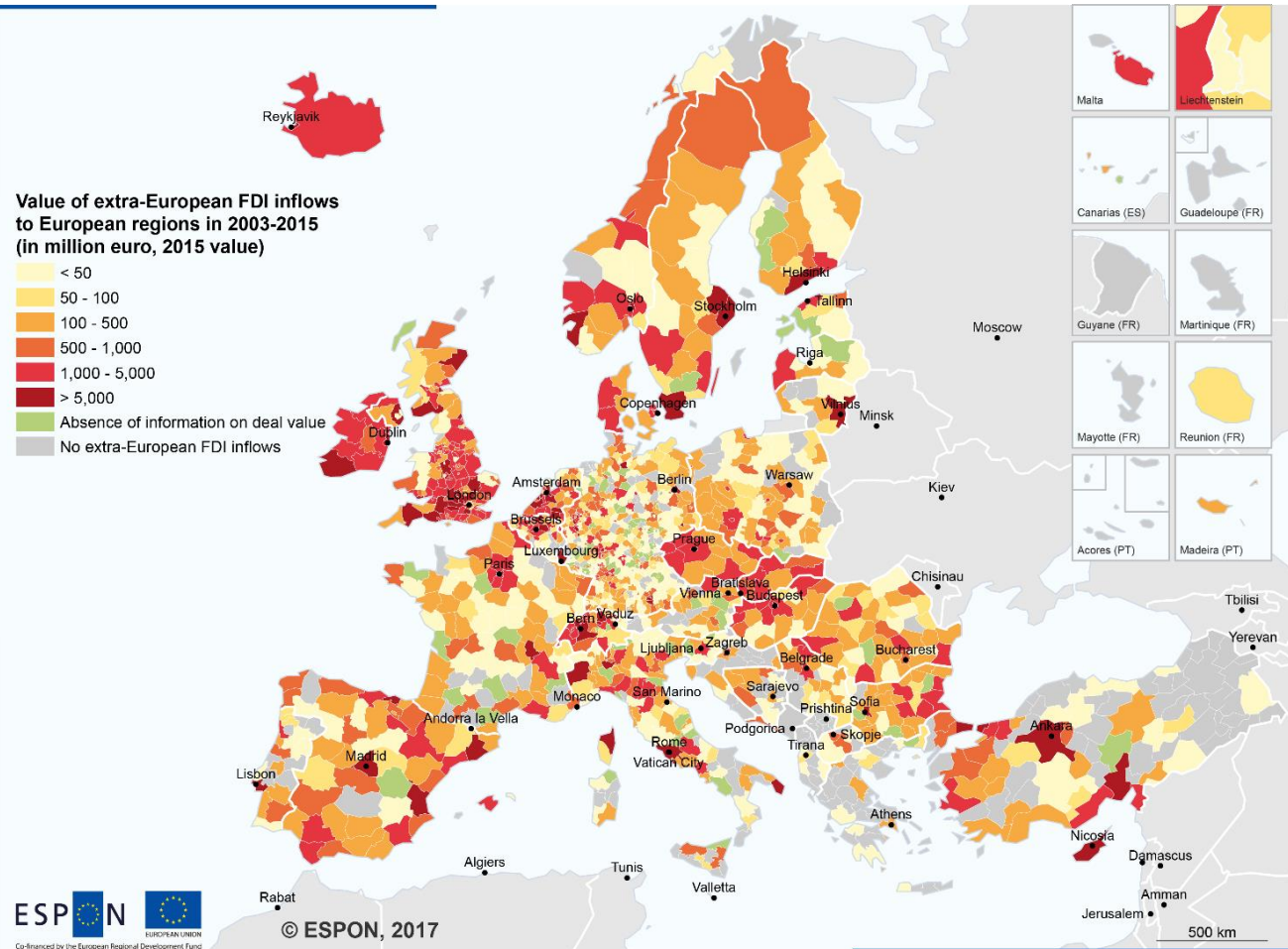


Scandinavian SMEs

Västra Götaland case study

Västra Götaland's traditional economy which is trade and export driven (25% of Sweden's total trade) consists largely of manufacturing industries such as vehicle and transport. However, a shift towards a more diverse business sector is emerging. The region is well suited for innovation and knowledge sharing (especially among universities, research centres, science parks and business incubators), and unemployment is low at 2.8%. As such, demands on the ICT sector are expected to continue yielding positive economic development yet retaining skilled workers with the right competences remains a challenge. Most SMEs in Västra Götaland are categorized as micro-enterprises with just one person employed and are concentrated in the knowledge-intensive sector. Only 14% of enterprises operating in the region have reported challenges when attracting applicants to relocate to Västra Götaland for work purposes, and at the same time many unique opportunities exist – i.e. green tech innovation which has increased almost 20% over the past decade - that draw people towards this area. The creative economy has grown to 12% of total enterprises.

Extra-European FDI inflows by sector across European regions 2003-2015



Regional level: NUTS 3 (2013)
Source: The World in Europe, global FDI flows towards Europe, 2017
Origin of data: Copenhagen Economics based on BvD's Zephyr and the Financial Times databases, 2016
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Extra-EU FDI Inflows across European Regions

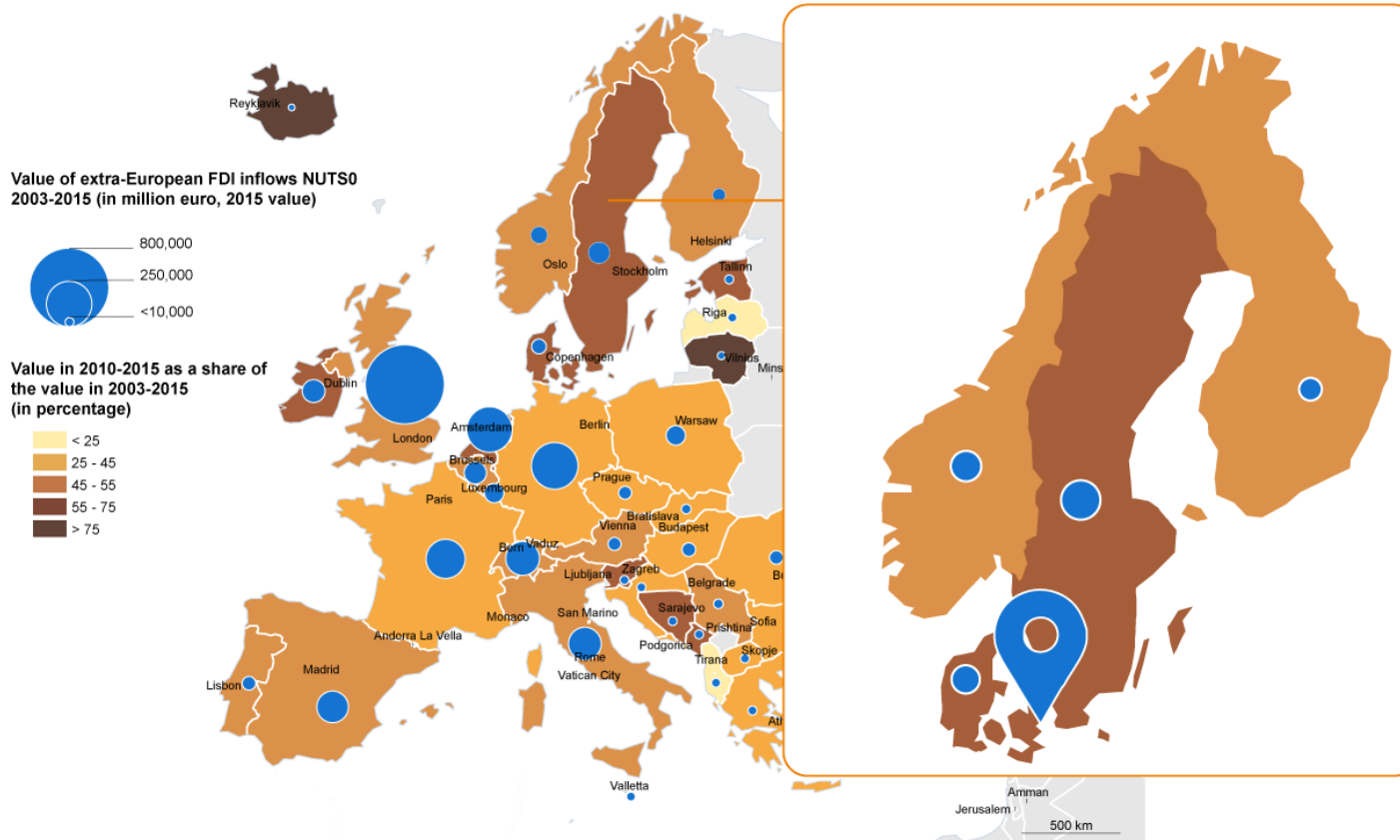


Language and regulatory obstacles are the main factors hindering the materialization of FDI. Areas that have removed cross-border barriers such as the Greater Copenhagen region and Skåne in Sweden are considered FDI success stories in Europe.



Rogaland was the top destination for extra-European FDI inflows between 2003 and 2015 and with a total value of investments exceeding EU 5 billion. Akershus, Oslo, Hordaland, Buskerud and Sor-Trondelag received FDI at between one and five billion euros in 2015. Northern Norway attracts up to a billion euros annually.

Extra-European FDI inflows across European countries 2003-2015



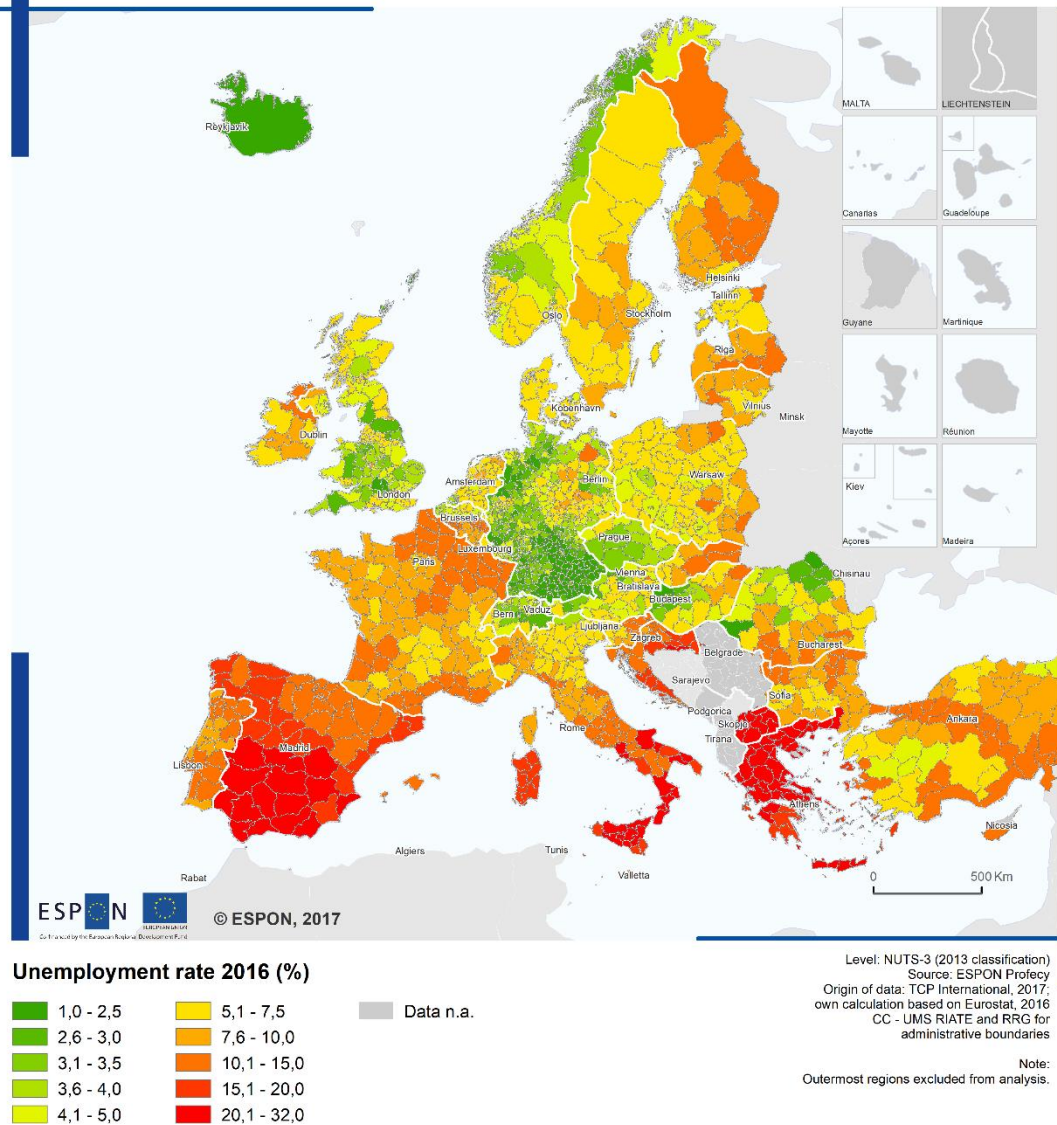
Scandinavian FDI

Greater Copenhagen case study

Greater Copenhagen accounts for around 85% of FDI value in Denmark and is comparable to Stockholm. FDI in Scandinavian cities has been successful in creating employment opportunities as industrial space is relatively affordable in the region. Territorial factors including high security, low corruption, high English proficiency and the fact that Copenhagen is part of a cross-border region (with Sweden) with good cross sectoral collaboration are important determinants of the Greater

Copenhagen region's attractiveness, while a relatively small market along with many peripheral areas fall under the negative territorial drivers. High costs of setting up as well as for operations, followed by low fiscal incentives deter potential FDI flows from reaching Denmark. Two frameworks are in place with the goal to create a greener, more innovative Greater Copenhagen region: 'internationalisation' and 'integrated labour market and business development'. These development strategies target four key areas: health-tech, medico, biotech, pharmacies and hospitals, green and clean-tech technologies, smart city solutions (IT sector, big data and urban management) and design and creative industries.

Unemployment rate 2016



Unemployment

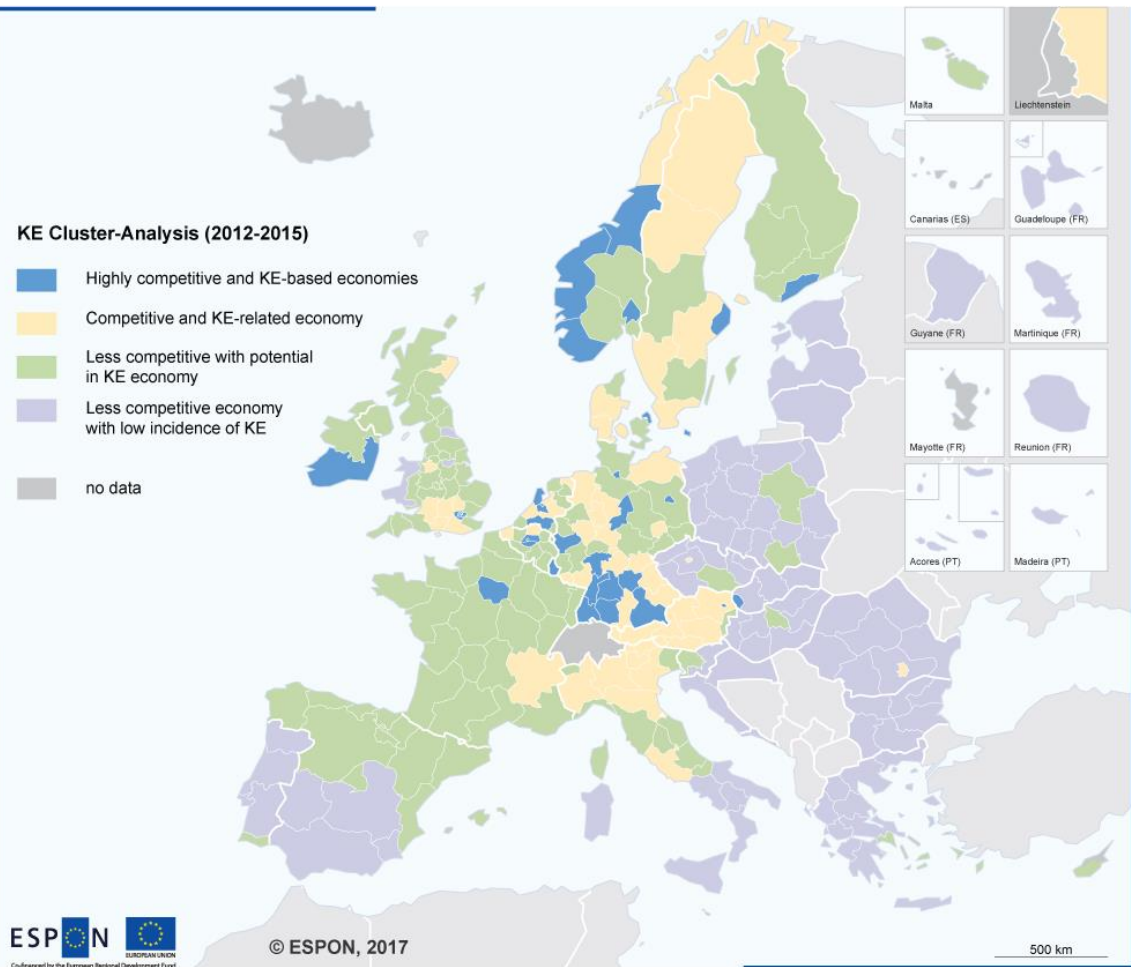


Southern Europe suffers from higher rates of unemployment than the central and northern areas. Spain, southern Italy, Greece and Croatia have some of the highest unemployment rates at 20-32%. Regions in Germany, Luxembourg, the Czech Republic, Austria, Norway, north east Romania and the UK have the lowest unemployment rates.



Norway has a low rate of unemployment in comparison to southern, eastern and parts of central Europe. The northern coastal regions are not as affected by unemployment as the urban, more densely populated regions such as Oslo, Akershus, Telemark or Aust-Agder. Despite much seasonal work and outward flowing labour, the country is performing better than Sweden, Finland and Denmark, suggesting that jobs are more accessible to citizens than in other parts of Scandinavia. In fact, Norway is striving to attract labour by creating better incentives to stay in jobs such as fisheries or to move to remote areas.

Types of competitive knowledge economies



Regional level: NUTS 2 (version 2013)
Source: ESPON EMPLOYMENT, 2017
Origin of data: Eurostat, 2016
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SMEs in Knowledge Economy

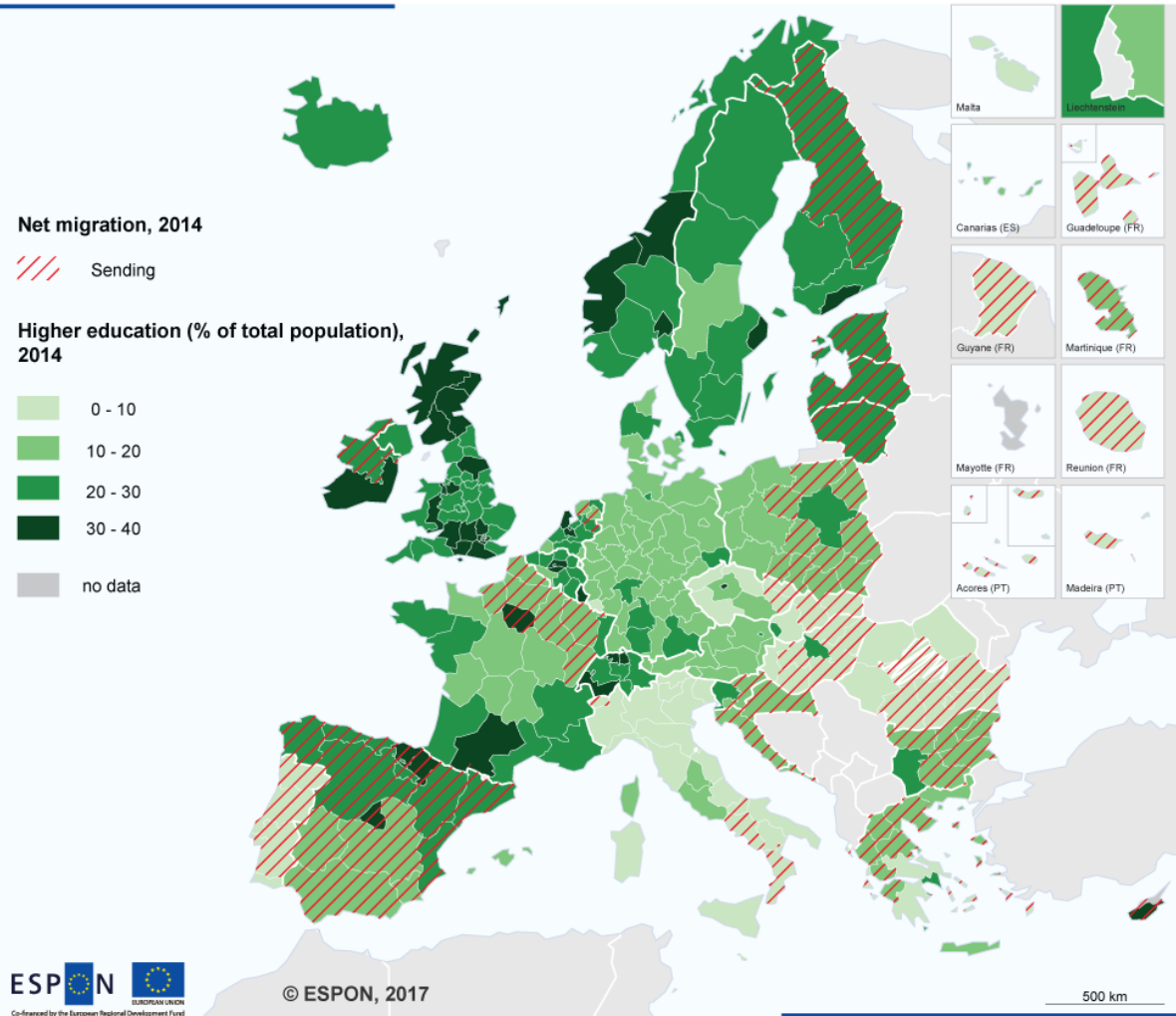


The knowledge economy is one of the most dynamic sectors of the European economy. Knowledge-based hubs are concentrated in southern Germany, Paris, Helsinki, Stockholm, Dublin, and the western Norwegian and Swedish coasts. Areas with lower potential are found in Spain, Portugal, Greece and Italy. In these countries specialized and highly skilled labour required for ICT and engineering is less available due to brain drain caused by labour migration.



In Norway, a high share of employment in knowledge and creative industries has led to a rise in SME employment overall. The areas with a highly competitive knowledge-based economy in Vest-Agder, Rogaland, Hordaland, Sogn Og Fjordane, More Og Romsdal, Oslo and Akershus. Competitive knowledge economies are more prominent in the northern regions of Nordland, Troms and Finmark. Hedmark, Oppland Buskerud and Telemark represent areas with potential for knowledge-based economies to be established.

People with Higher Education qualifications in science and technology, 2014



Regional level: NUTS 2 (version 2013)
Source: ESPON EMPLOYMENT, 2017
Origin of data: Eurostat, 2016
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People with higher education qualifications

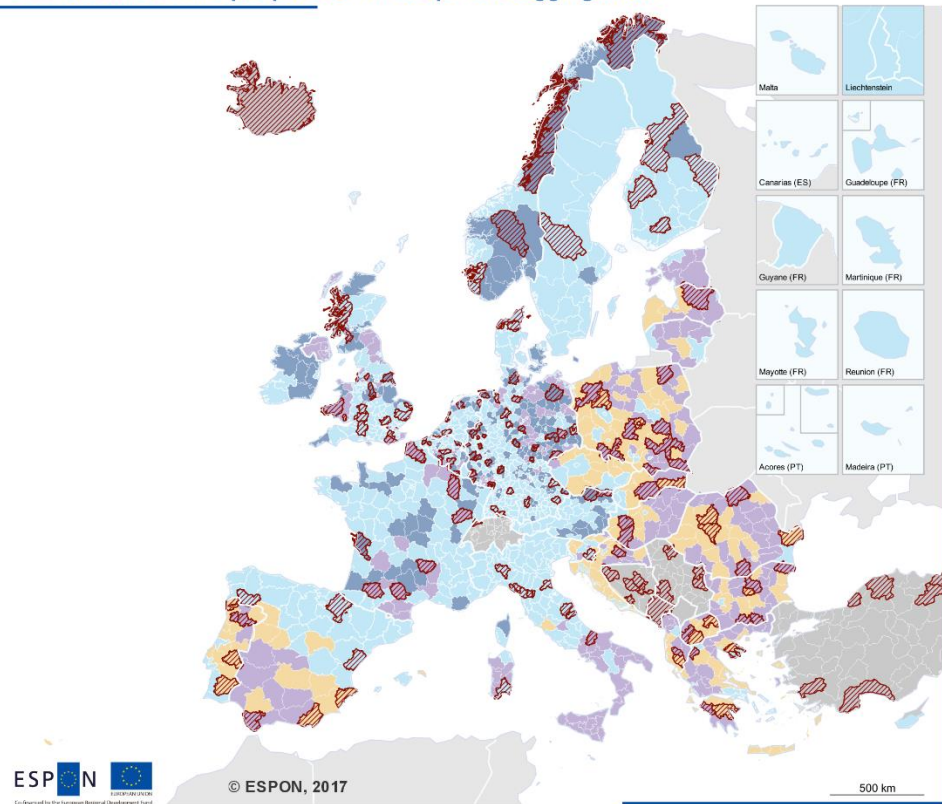


The greatest share of people with higher education qualifications are found in the metropolitan areas of Stockholm, Helsinki, Paris, London, the Benelux countries and Switzerland and in regions in northern Spain and southern France, Ireland, Scotland and western Norway. The Baltic states, Ireland, northern Spain, northern France, southern Italy, eastern Finland and urban eastern Europe are faced with outward flows of highly skilled people.



Similar to other Nordic and Baltic countries, and along with the UK, Norway has a large share of the population with higher education in science and technology (concentrated on the west coast and the capital region).

Delineation 2: Inner peripheries in Europe and lagging areas



Delineation 2 (poor economic potentials)

Lagging regions

- GDP/capita < 75% of EU average GDP/capita ≥ 75% of National average
- GDP/capita < 75% of National average and GDP/capita ≥ 75% of EU average
- Both GDP/capita < 75% of EU average and GDP/capita < 75% of National average
- Not lagging NUTS 3 regions
- No data

Economic performance in Norwegian peripheral areas

Vågan case study

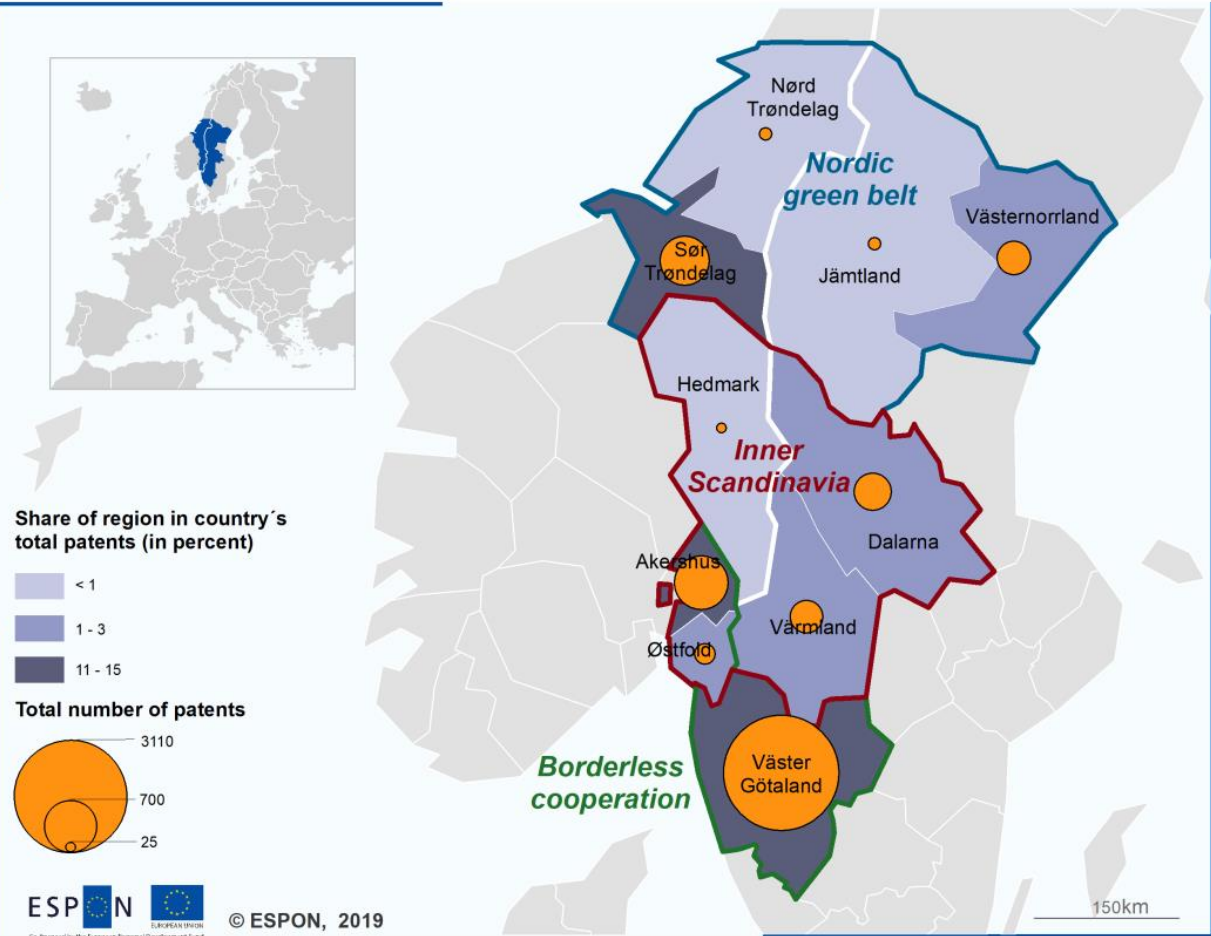
The Vågan economy can be divided into four sectors: social, public, productive and residential. Residential gross income makes up the majority of the Vågan economy (47%) followed by public basis income at 27%.

In Vågan, people in their 30-40s typically find work in the public sector and have a good overall rate of employment which is due to opportunities generated by national policies. Private services and fishing are also common sources of livelihood, meanwhile nature and tourism provide seasonal positions for workers from other regions.

As a result of the long commuting distance to higher education services, it is estimated that up to 60% of those aged 20-30 leave Vågan to attend university or acquire low skilled jobs. Around 20% return in their 30s and 40s.

Moreover, the brain drain Vågan experiences from the number of young people who leave to receive an education can be offset by the increasing number of distributed and decentralized employment offers.

Norway-Sweden Cross Border Cooperation: Patents 2007-2013

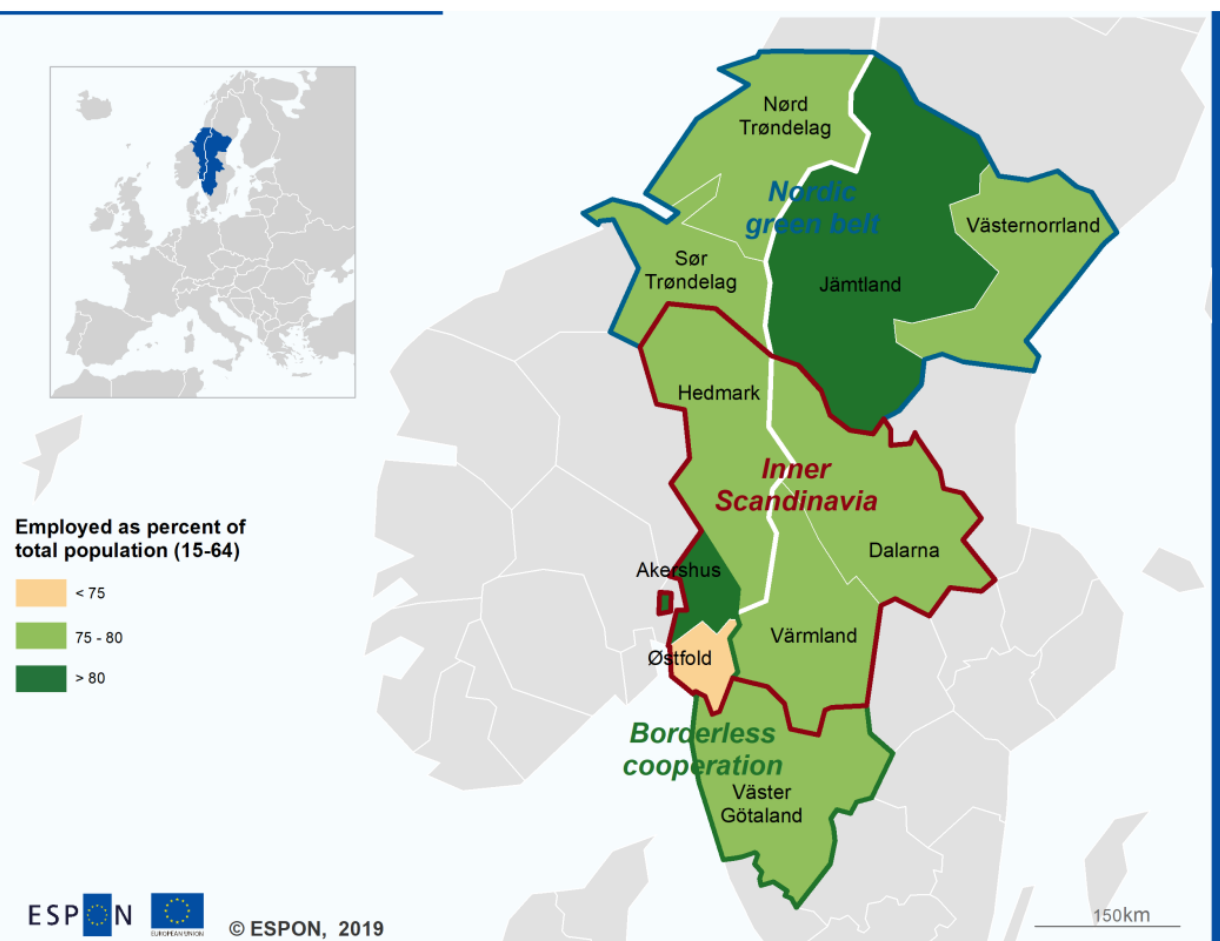


Cross-border economic development

Inner Scandinavia and Nordic Green Belt case studies

Economic growth in the cross-border area over the past few years has varied from moderate in the more rural regions (which also feature meagre demographic prospects and decreasing population), to strong in the most industrialised regions. There is considerable variation across the programme area regarding which sectors dominate the local economy: some regions have extensive forestry or agriculture industries in their respective counties (e.g. Hedland in Norway or Värmland in Sweden), others host large clusters of industrial production (the automobile industry centred around Trollhättan, Sweden). Innovative capacity, especially outside the urban centres of the programme area, is highlighted as a specific challenge.

Norway-Sweden Cross Border Cooperation: Employment rate 2016



The education levels and skillsets among the inhabitants in remote regions are comparatively low, and long geographic distances inhibit engagement in innovative cluster activities. R&D investment levels are modest across the programme area. SMEs are identified to warrant specific attention; 90% of all enterprises in the programme area are SMEs, but the number of newly-established SMEs has decreased in recent years. The border presents a further challenge to this, as there still exist differences in skill certification and information asymmetries between the Swedish and Norwegian regions and between urban and rural areas within these regions. This makes it difficult to match the needs of the labour market with skilled labour. It also complicates reaching critical mass and thus building up and maintaining the competitiveness of the border region.

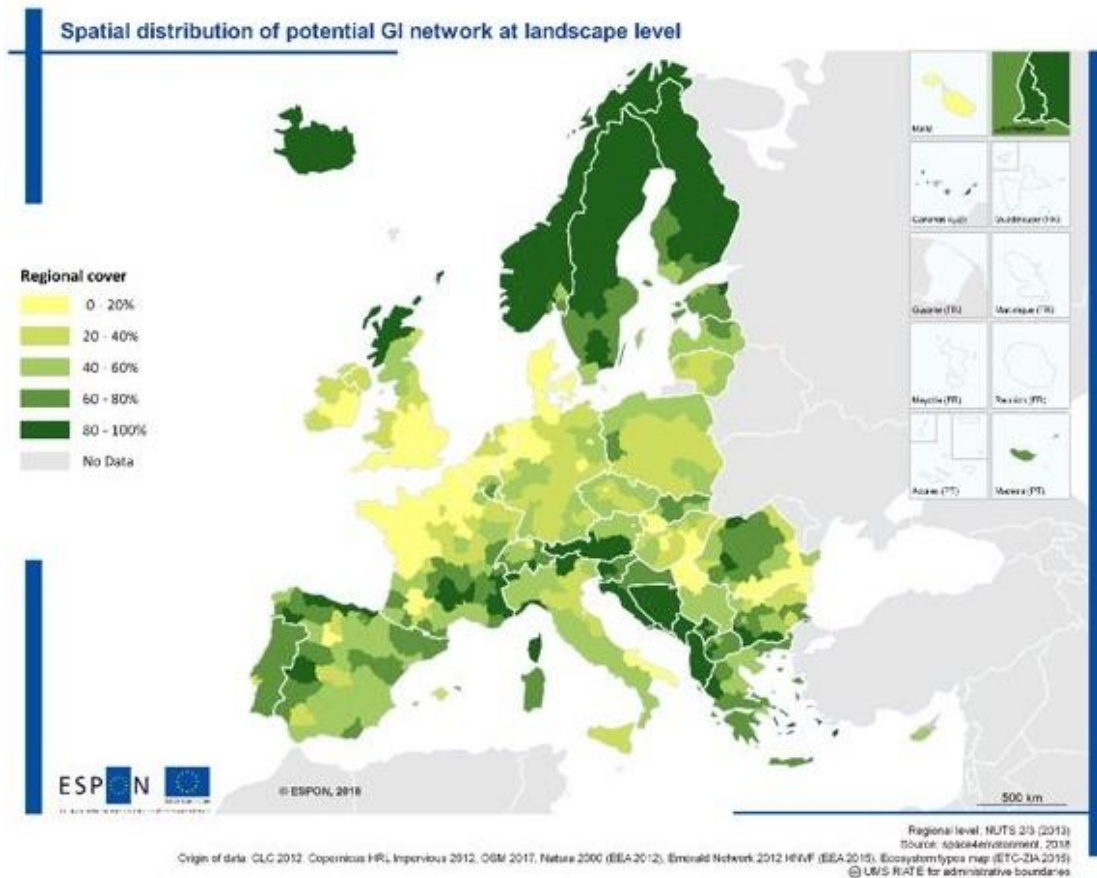
Territorial level: NUTS3 (version 2013)
Source: Espo CBC TIA, 2019
Origin of data: Nordregio's calculations based on NSIs and Eurostat, 2019
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Ecosystems and renewables

Green infrastructure

Renewable energy



Spatial Distribution of Potential Green Infrastructure Networks

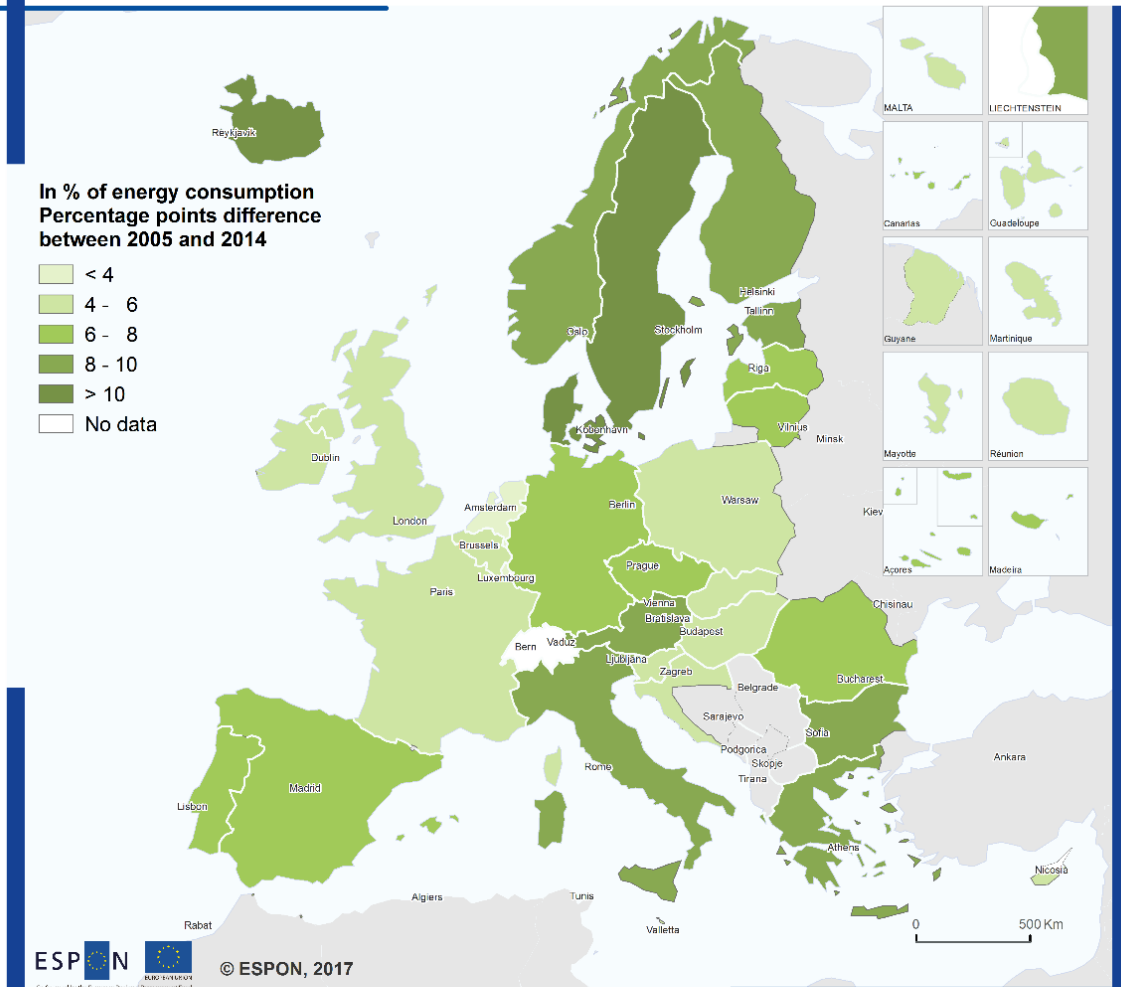


Green Infrastructure (GI) networks have the highest potential for positive externalities through ecosystem services in the Nordic and western Balkan regions, along with parts of southern France, northern Spain, Scotland and Iceland. Ecosystem services include food, water and energy supply, pollination; carbon sequestration, detoxification, waste decomposition, water and air purification; flood / climate regulation; and leisure and tourism.



Norway's land use is divided into 63% forest, 21% cropland, 2% water and just 8% urban. Such topography is represented by the dark green areas where biodiversity, climate change and water policies have a high percentage cover for potential GIs to be introduced. The shared natural ecosystem among the Nordic countries suggests that the spatially-contiguous large area is an ideal region for cross-sectoral cooperation for stakeholders to work together to achieve common objectives. Central Europe tends to yield more benefits from GI services than North-eastern and South-western Europe where extensive potential remains.

Share of renewable energy 2004 - 2014



Regional level: NUTS 0 (version 2013)
Source: Spiekermann and Wegener Urban and Regional Research (S&W), Territorial Futures, 2017
Origin of data: Eurostat (online data code: t2020_31), 2004 & 2014
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Share of renewable energy



Grid networks are crucial for the success of renewable energy transmission. Development of a single energy market is needed in central and north Europe where energy consumption is the highest. High energy costs due to geographical insularity, small economies of scale, reliance on imported energy and limited or lack of connection to the EU single energy market are some of the obstacles faced by Italy, Bulgaria, Greece and the Nordic countries.



Renewable energy consumption in Norway is consistent with other Nordic countries (mainly Finland) with around 8-10 percentage points increase between 2005 to 2014. Italy, Austria, Bulgaria and Greece saw similar increases in their shares of renewable energy consumption. Sweden, Denmark and Iceland have seen increases above 10% in their renewables consumption.

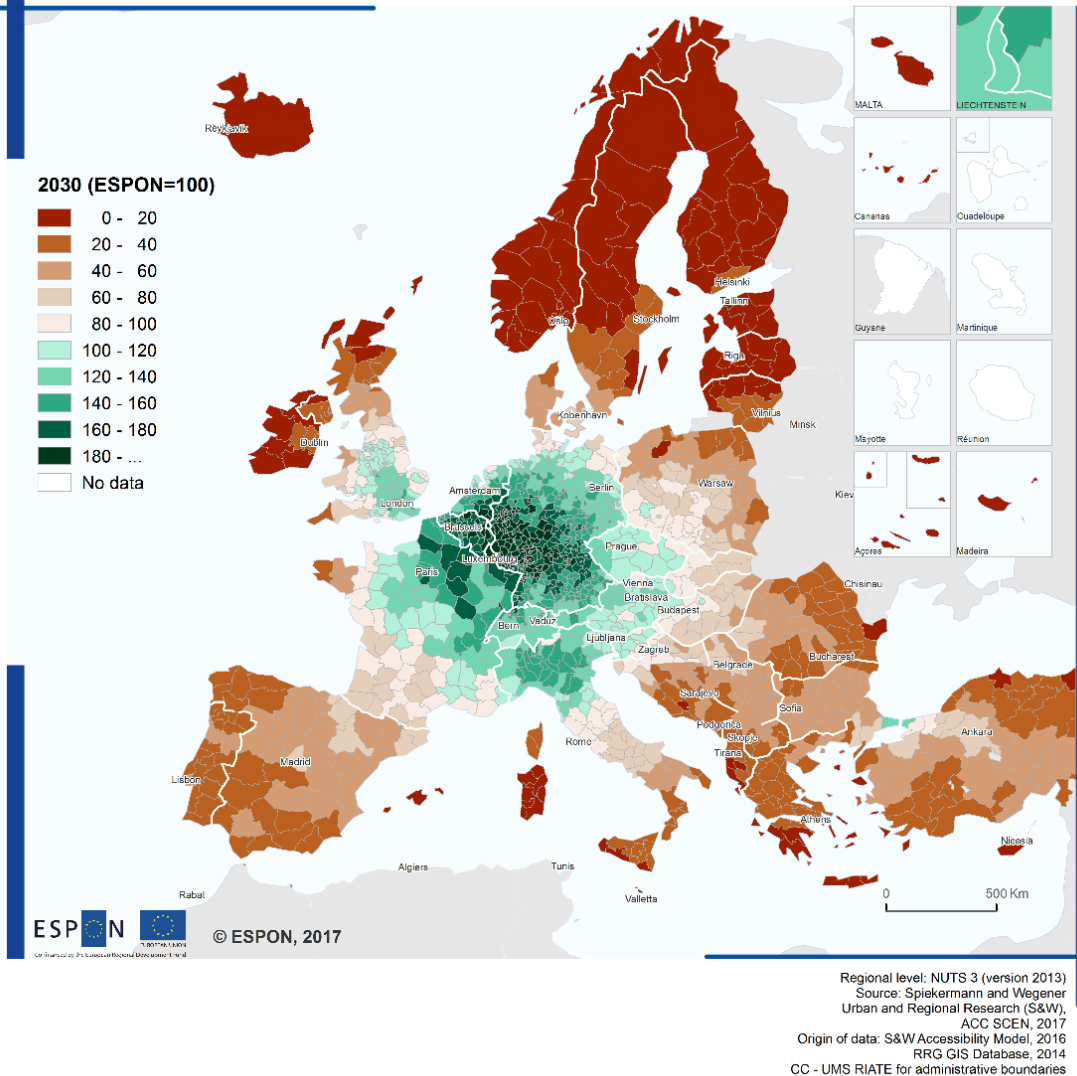


Territorial challenges

Potential accessibility 2030 (road)

Inner peripheries

Accessibility potential, road



Potential accessibility by road 2030

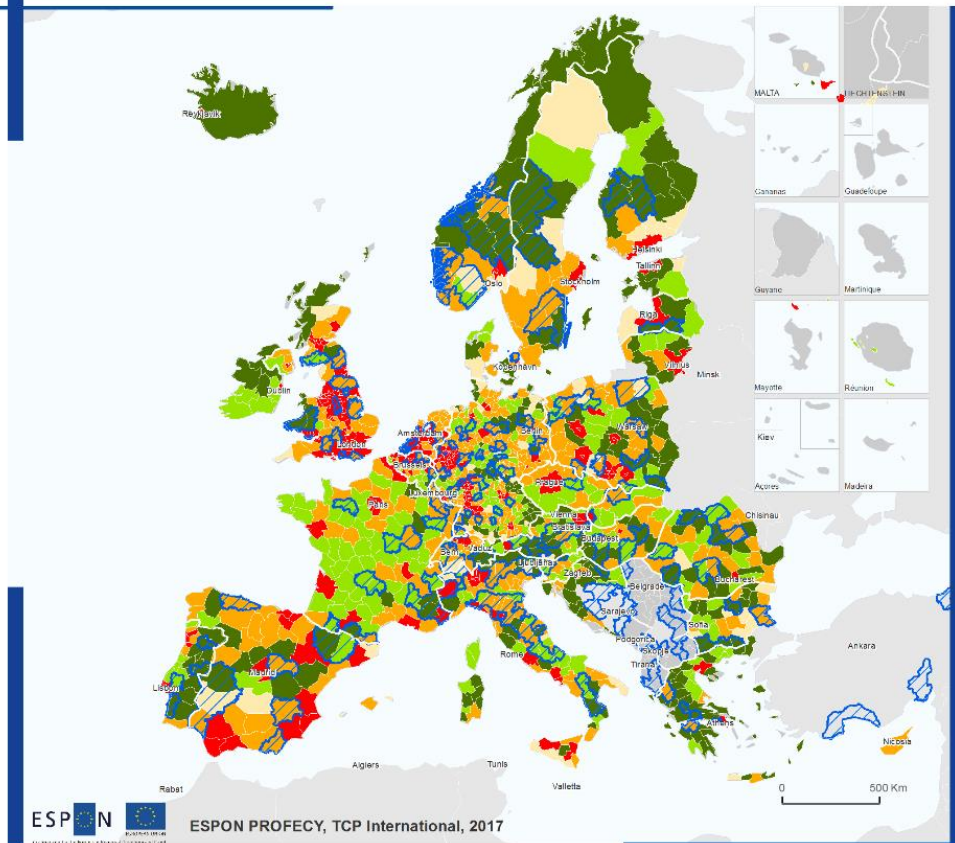


Potential accessibility is measured by calculating how quickly people in one region can reach other people, services and markets. Potential accessibility tends to be stronger in the European core and gradually declines in the peripheral areas. The current differences between the European core and peripheral areas are projected to remain by 2030. Accessibility by road will continue to decrease in regions towards Europe's outer core, while southern Europe (Peloponnese peninsula and the Mediterranean Islands) will have potential road accessibility of less than a fifth of the European average. Rural south-western Europe will reach only 60% of the EU average and northern Europe will continue to lack connectivity under the assumption that sparse populations and geographical specificities deter innovative solutions.



Most regions in Norway have amongst the lowest potential road accessibilities, along with regions in Sweden, Finland and Iceland, below 20% of the European average.

Delineation 1: Inner Peripheries in Europe and NUTS-3 regions



Delineation 1: Inner Peripheries and urban-rural typology

IP regions in Europe (100 regions)

Urban-rural typology:

- Predominantly urban regions
- Intermediate regions, close to a city
- Intermediate, remote regions
- Predominantly rural regions, close to a city
- Predominantly rural, remote regions

Level: NUTS-3 (NUTS 2013 classification) (IPs)
NUTS-3 (NUTS 2010 classification) (Typology)
Source: TCP International, 2017
Origin of data: TCP International Accessibility Model, 2017
CC - Eurostat-GISCO, RRG GIS Database

Note:
French outermost regions excluded from analysis.
Cyprus and Malta excluded because the represent rather small island states.

Inner peripheries

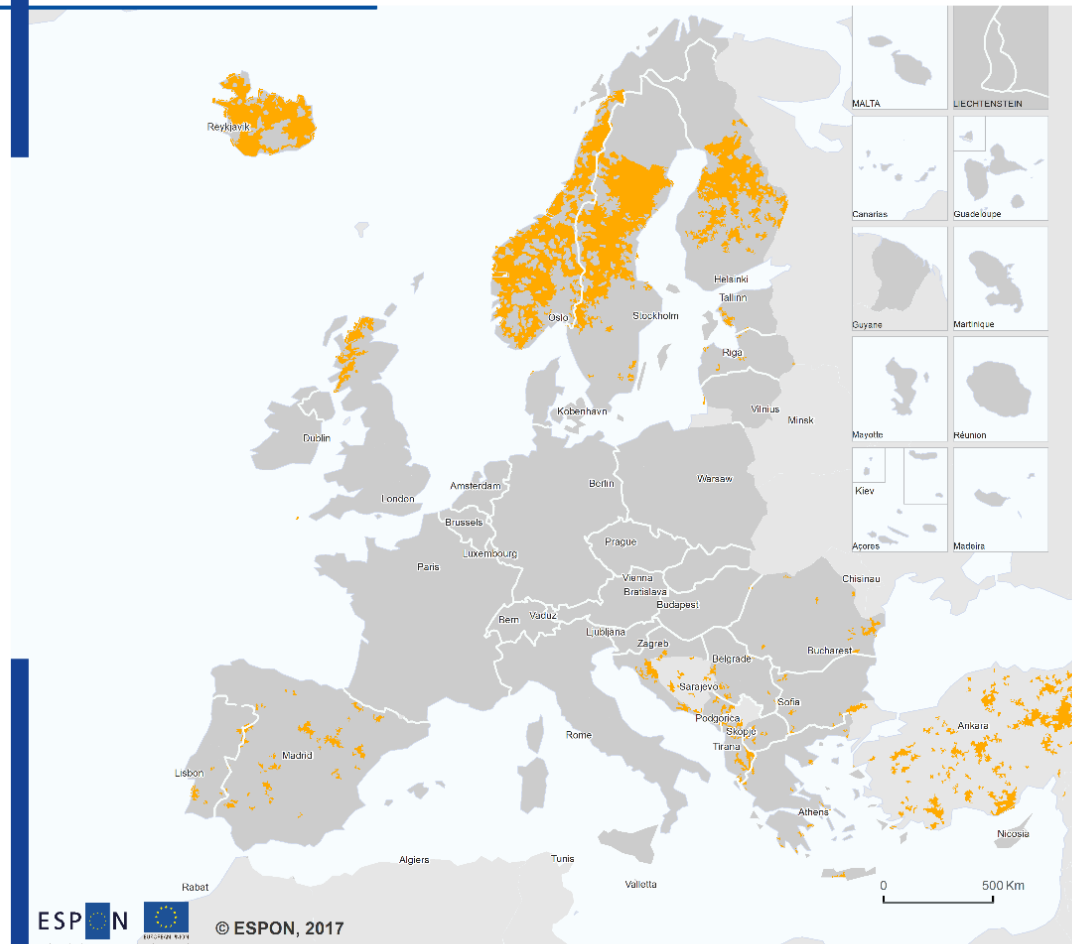


Inner peripheries are struggling in a downward spiral of economic and demographic decline compounded by decreasing access to public services and the incapacity to recoup non-spatial links with adjacent territories. Inner peripheries are disadvantaged regarding demographic processes, e.g. they have a bigger share of shrinking regions. Negative position shifts of population dynamics in inner peripheries are more striking than in other national territories, which might draw attention to the current demographic vulnerabilities of these territories and potentially outline their future socio-economic risks.



A large portion of the Norwegian territory is classified as remote or rural and at risk of becoming an inner periphery. Like Sweden and Finland, Norway's main urban region is limited to the capital city area of Oslo and Akershus, while only a few intermediate regions exist in Buskerud, Vest-Agder, Sor-Trondelag, eastern Hordaland and southern Rogaland. Given Norway's sparse population, the country does not follow the same trend as central Europe where rural regions are situated within close proximity to cities. Connecting Norway's regions is far more expensive and resource intensive and thus areas like Nordland, Troms, Hedmark, Oppland, Finnmark and Sogn Og Fjordane could potentially become inner peripheries in the future.

Areas of risk to become inner peripheries in future



Areas of risk to become inner peripheries:
Areas with access to just one hospital
within 60 min and to just one primary
school within 15 min car travel time

Areas-of-risk to become future IP

Level: Grid cells
 Source: ESPON Profecy
 Origin of data: TCP International, 2017;
 TCP International Accessibility Model, 2017
 CC - UMS RIATE for administrative boundaries
 Note:
 Outermost regions excluded from analysis.

Areas at risk to become inner peripheries due to poor access to healthcare and primary education



One of the methods used to measure inner peripheralization is to examine access to healthcare and primary education. Areas with poor access to these primary services can be found in Scotland, Spain, Portugal, the western Balkans and most prominently in the Nordic countries.



Norway along with other Nordic countries has the most susceptible territorial mass for becoming inner peripheral areas when it comes to access to healthcare and primary schools. A significant share of the territory has access to just one hospital within 60 minutes by car and one primary school within 15 minutes. The bordering regions of Sweden face the same accessibility challenges as Norway but perform slightly better in the northern and southern regions. Norway's capital region performs the best in terms of connectivity.

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