Resource efficiency and low carbon economy

Environmental Goods and Services Sector: employment and value added

Indicator	EU indicator past trend	Selected objective to be met by 2020	Indicative outlook of the EU meeting the selected objective by 2020
Employment and value added in the environmental goods and services sector		Promote a larger market share of green technologies in the Union and enhance the competitiveness of the European eco-industry - 7th EAP	

Overall employment and value added continue to increase, although growth in the sector has slowed since 2011. The prospects of continued growth are uncertain and dependant on the sector competing with equivalent sectors in China and the USA, and continuing ambitious renewable energy and green growth policies in Europe

The Seventh Environment Action Programme (7th EAP) calls for strengthening the market share of green technologies and enhancing the competitiveness of eco-industries by 2020. The Environmental Goods and Services Sector (EGSS) has grown consistently faster than the rest of the EU economy, in terms of both employment and value added over the 2003–2013 period. The EGSS was largely unaffected by the economic downturn, with output growing by more than 50 % over this period and employment reaching over 4 million full-time equivalents. This is partly because of an increase in public sector spending on green infrastructure in the years since the economic downturn, but has mainly been driven by growth in the renewable energy sector. Growth in the EGSS has slowed since 2011, as a result of increasing global competition and a reduction in domestic investments in renewable energy. The EGSS will need to retain global competitiveness to achieve the 2020 7th EAP objective. This could be aided by continuing ambitious renewable energy and green growth policies in Europe.

For further information on the scoreboard methodology please see Box I.1 in the EEA Environmental indicator report 2016

Setting the Scene

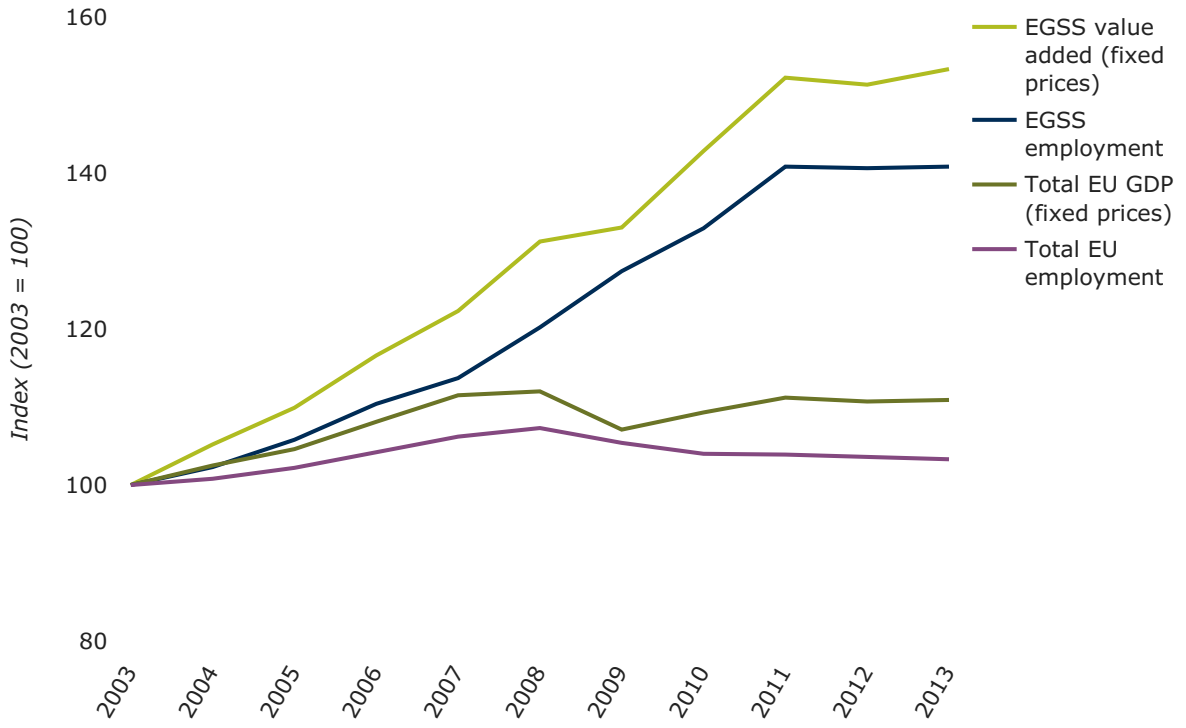
The 7th EAP (EU, 2013) calls for strengthening the market share of green technologies in the European Union and enhancing the competitiveness of European eco-industries. This will not only reduce the environmental impacts of the economy but could also have important socio-economic benefits in terms of value added and employment. This briefing presents trends in value added and employment in the EGSS. This reflects the objectives of the Europe 2020 Strategy towards a sustainable economy (EC, 2010), including growing employment in the green economy (EC, 2012). In the context of globalisation and technological change, the green economy offers potential for growth. Europe as a global leader in the development of environmental goods and services has significant potential for exporting this expertise (EC, 2015a).

Policy targets and progress

The increased awareness of the need to combat environmental pollution and preserve natural resources has expanded compliance obligations within the environmental acquis and increased the supply and demand of environmental goods and services, i.e. products to prevent, measure, control, limit, minimise or correct environmental damage and resource depletion.

The Europe 2020 Strategy does not include any targets on employment or output from the eco-industry sector, i.e. the EGSS. However, the EGSS environmental–economic account enables reporting on trends in output and employment and so informs on progress towards a green economy. The EGSS encompasses **environmental protection activities** — related to preventing, reducing and eliminating pollution and any other degradation of the environment — and **resource management activities** — which include management of energy resources (renewable energy production and equipment and installations for heat and energy saving).

Figure 1. Employment and value added in the Environmental Goods and Services Sector (EGSS) compared with the whole economy, EU



Data sources:
a. Eurostat. Production, value added and exports in the environmental goods and services sector (env_ac_egss2)
b. Eurostat. Employment in the environmental goods and services sector (env_ac_egss1)
c. Employment and activity by sex and age - annual data (lfsi_emp_a)
d. Eurostat. GDP and main components (output, expenditure and income - nama_10_gdp)

Figure 1 shows that, since 2003, the EGSS has seen faster growth in employment and value added than the total EU economy on average. The sector's contribution to gross domestic product (GDP) has grown from 1.4 % in 2000 to 2.1 % in 2013, and its contribution to total employment in the EU has grown from 2.8 million full-time equivalents (FTEs) to 4.2 million over the same period.

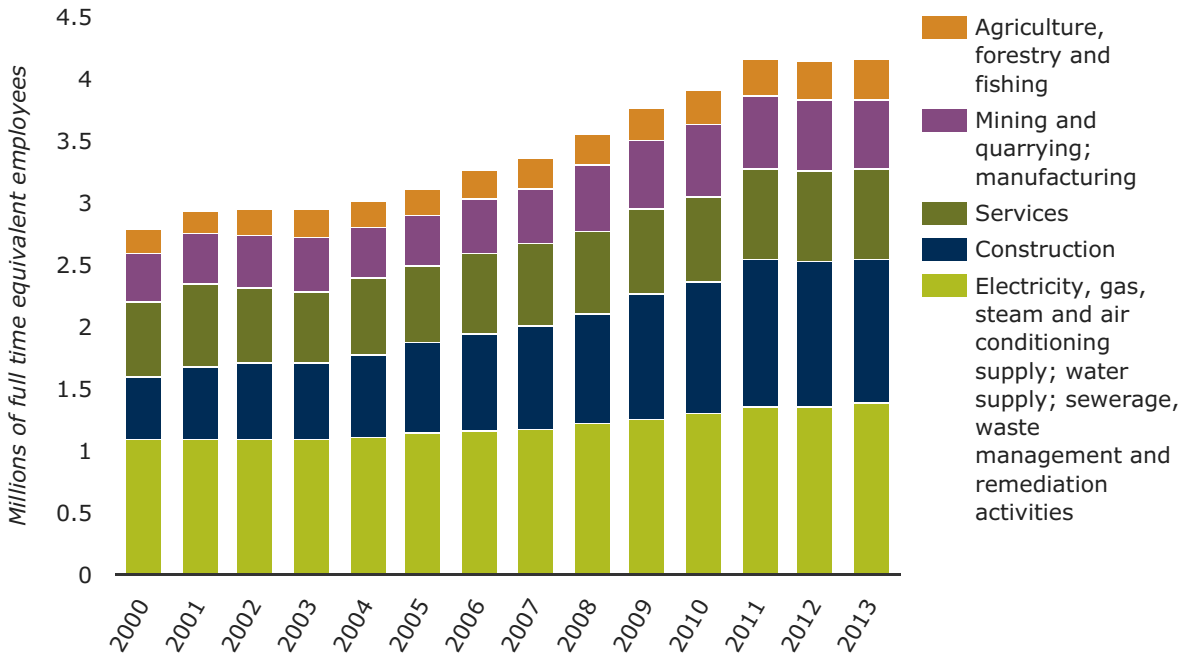
The continued expansion of the EGSS, even in the years immediately following the financial downturn, partially resulted from innovation and Europe's competitiveness in the global market, but it was also supported by public spending on environmental protection and renewable energy (Görlach et al., 2014; AIRS_PO2.13, 2016[1]). Some of the most successful government interventions have been investment support schemes, which provided investors

with a high degree of investment certainty. Especially in difficult economic times, governments can play a significant role in supporting private investment in the EGSS by guaranteeing the certainty needed by investors (Görlach et al., 2014).

Growth in both environmental protection activities and resource management activities has been strong but has been particularly high in the resource management area, whose value added grew from EUR 50.7 billion in 2003 to EUR 116.7 billion in 2013 (at 2010 prices). While the renewable energy sector was the key driver in this growth, environmental protection activities still represent the major element of the EGSS, with a value added of EUR 156 billion in 2013.

EU employment in environmental protection and resource management activities was estimated at 4.2 million FTEs in 2013 (Figure 2). Employment trends were mainly driven by the growing importance of activities that manage energy resources, in particular the production of energy from renewable sources, the production of wind and solar power stations and equipment and installations for heat and energy saving (Eurostat, 2016).

Figure 2. Employment by activity in the Environmental Goods and Services Sector, EU



Data sources: Eurostat. Production, value added and employment by industry groups in the environmental goods and services sector (env_ac_egss3)

Despite the successes of the sector, recent trends are not so positive, with growth in employment and value added in the sector having slowed since 2011. This may be explained by increasing competition from the United States and China (Görlach et al., 2014) and a decrease in domestic investments in renewable energy. In 2013, EU investment in renewables fell by 44 % compared with the previous year as a result of ongoing uncertainty on the future of support mechanisms and lower investment capacity in some EU countries (UNEP, 2016) (AIRS_PO2.6, 2016).[2] Overall, the future prospects for growth of the EGSS are strongly dependent on continuing ambitious renewable energy and green growth policies in Europe and how these impact on competition with the United States and China.

The overall increase in employment and value added in the EGSS sector is a positive development. However, a greener economy is not inclusive and socially sustainable by default, and the transition phase is likely to entail some challenges, particularly within certain sectors and certain types of jobs. Consequently, a comprehensive approach is needed that ensures that green jobs are also decent jobs that contribute to social inclusion (ILO, 2008).

Outlook beyond 2020

An expanding EGSS is a key factor in achieving low-carbon growth decoupled from resource use, as envisaged in the 7th EAP. Policies on energy efficiency and renewable energy (EC, 2015b) and waste recycling (EC, 2015c) cover a period beyond 2020, suggesting that there could be long-term growth in the EGSS. Further expansion of the EGSS could be assisted through ambitious renewable energy and green growth policies at the EU and national levels but also via more direct assistance such as investment support schemes that provide investors with a high degree of investment certainty.

About the indicator

This briefing uses data from the EGSS account, which is a module of the European environmental–economic accounts. Environmental accounts analyse the interaction between the economy and the environment by organising environmental information in a way that is consistent with national accounts. The EGSS is defined as that part of a country's economy that is engaged in producing goods and services that are used in environmental protection activities and resource management either domestically or abroad. The income created by the EGSS is expressed in terms of gross value added (at 2010 prices), which is the difference between output and intermediate consumption. Employment in the EGSS is expressed in terms of full-time equivalent jobs.

The data are broken down by industry (e.g. services, construction, etc.); environmental protection class (e.g. wastewater management, waste management, protection of biodiversity and landscapes); and resource management class (e.g. water management, energy resource management). The EGSS does not cover a number of resource management economic activities, e.g. the management of forest resources, the management of wild flora and fauna and research and development on resource management.

European environmental accounts are established by Regulation (EU) No 691/2011 on European environmental economic accounts. From 2017, reporting of data on the EGSS will be mandatory and standardised (Eurostat, 2015). Current data are a combination of Eurostat estimates with some Member State data reported through voluntary surveys. There are some comparability issues at country level in terms of coverage, time series availability and the use of different classifications or approaches for calculating employment data. For more information please see http://ec.europa.eu/eurostat/cache/metadata/en/env_egs_esms.htm.

Footnotes and References

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