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Interim report on the sustainable energy sector 2013- June 2013

1. Introduction

This interim report summarises the first results of the study on the sustainable energy sector (SES) 2013. It continues upon two earlier reports on the SES that were published by Statistics Netherlands in 2011 and 2012. A comprehensive introduction on the subject can be found in 'Economic Radar of the Sustainable Energy Sector in the Netherlands 2012' (SES Radar 2012), which is available on the website of Statistics Netherlands[1]. The period discussed in this report is 2008 – 2010. A full report in which the time series is extended to 2011 will be published in October 2013.

The SES covers economic activities related to renewable energy, energy saving and new energy technologies like smart grids and electric transport. The SES is separated into the *pre-exploitation phase* (P-SES) and an *exploitation phase* (E-SES). The P-SES consists of a population of companies that are active in value chains preceding the exploitation phase, such as the production of renewable energy systems, R&D focusing on sustainable energy technologies, transport of wind turbines or trade in biomass. The E-SES consists of the companies that are active in the actual production of renewable energy.

The economic indicators presented in this report are: :

- Employment (in fte's)
- Production

[1] Link to Economic Radar of the Sustainable Energy Sector in the Netherlands 2012

- Value added
- International trade (i.e. import and export)
- Capital formation

The figures of the P-SES are presented separately for specialised and non-specialised companies. Specialised companies are companies whose activities are all directed at producing sustainable energy product(s). Non-specialised companies produce sustainable energy goods or services together with other products that are not relevant for this study. Furthermore, the companies are differentiated according to their business activity (e.g. research & development or installation services) and the concerned energy process/technology (e.g. solar or wind energy). These distinctions allow for more detailed and in depth analysis of the P-SES. A more comprehensive description of these categories can be found in the SES Radar 2012. The focus of this interim report is mainly on developments at the macro level in the E-SES and the specialised and non-specialised companies in the P-SES.

Update and revision

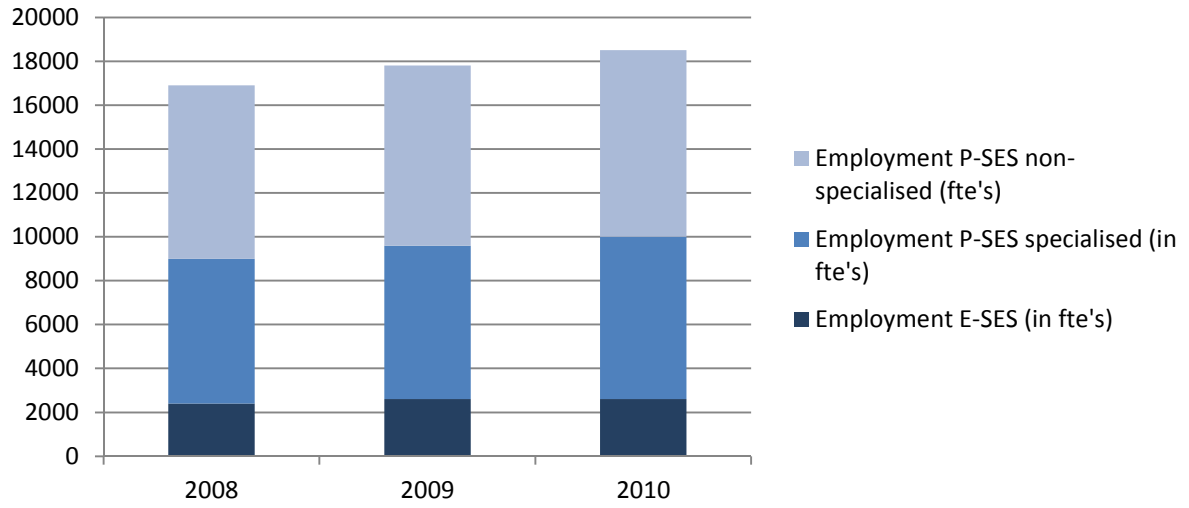
The figures in this report are the result of an updated and revised population of SES companies. Additional data sources have been used in order to identify new companies that are relevant for the P-SES. The data sources used in the update were provided by the energy department of Statistics Netherlands, ECN, the subsidies and patent department of NL Agency, PolderPV and participants in the wind offshore theme group of 'Topsector' Energy (Ministry of Economic Affairs) supplemented with some purposeful internet and database search by the authors of this report. Figures for reporting year 2008 and 2009 are different in this report compared to the figures presented in the SES Radar 2012 for two reasons: the population has changed and specialisation factors at micro level have been revised. It should also be noted that in contrast to the SES Radar 2012 the production of biofuels is now included in the figures of the E-SES instead of in the figures of the P-SES.

While the inclusion of new data sources results in a substantial quality improvement of the figures, it should be noted that the work on the economic figures of sustainable energy sector is still a 'learning process'. On-going interaction and discussions with stakeholders and researchers as well as the international statistical community will result in future improvements and possibly extensions of the figures on the SES.

In the next few paragraphs the results are presented for the key-indicators of the SES: employment, production, value added, international trade and capital formation. The data has the status 'preliminary'. The last paragraph discusses some future plans.

2. Employment

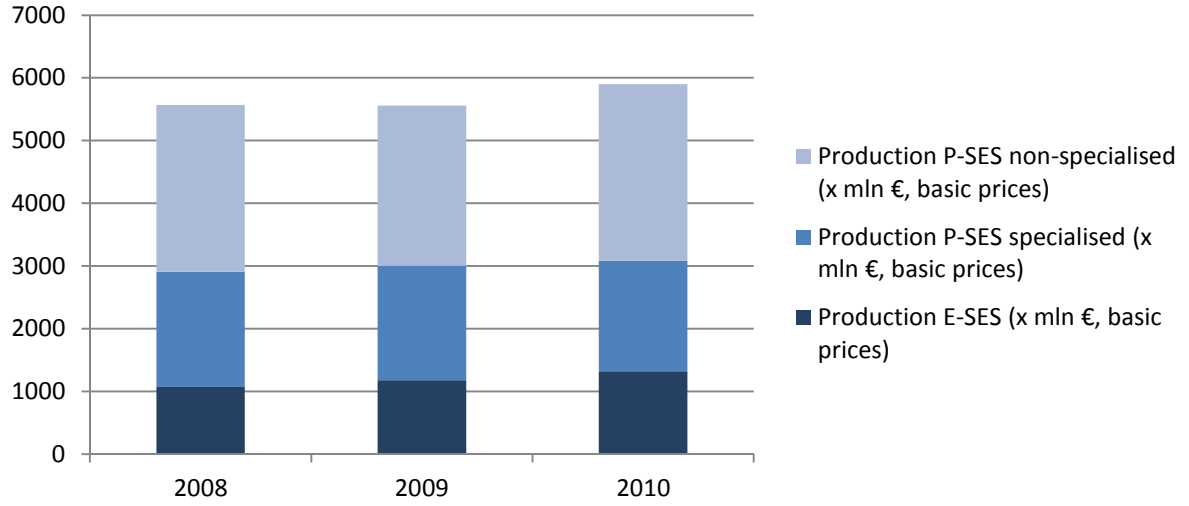
Figure 1: Employment (in fte's) in the exploitation phase (E-SES) and the specialised and non-specialised companies in the pre-exploitation phase (P-SES) of the SES



The overall employment in the SES has been increasing. In fact, the increase was 9% over the period 2008 – 2010, which is quite substantial in a period where national employment levels were decreasing. The driving force of this growth were the specialised companies in the P-SES (12% over the period 2008 – 2010).

3. Production

Figure 3: Production (in mln €) in the exploitation phase (E-SES) and the specialised and non-specialised companies in the pre-exploitation phase (P-SES) of the SES



In contrast to employment, the development of overall production (current prices) shows a more stable pattern. Over the period 2008 – 2010 the production increased by 6%. This is mainly due to the growth in the E-SES (23%). The production of specialised companies in the P-SES decreased by 4% while the production in the E-SES and the non-specialised companies in the P-SES increased by 6%.

4. Value Added

Figure 2: Value added (in mln €) in the exploitation phase (E-SES) and the specialised and non-specialised companies in the pre-exploitation phase (P-SES) of the SES

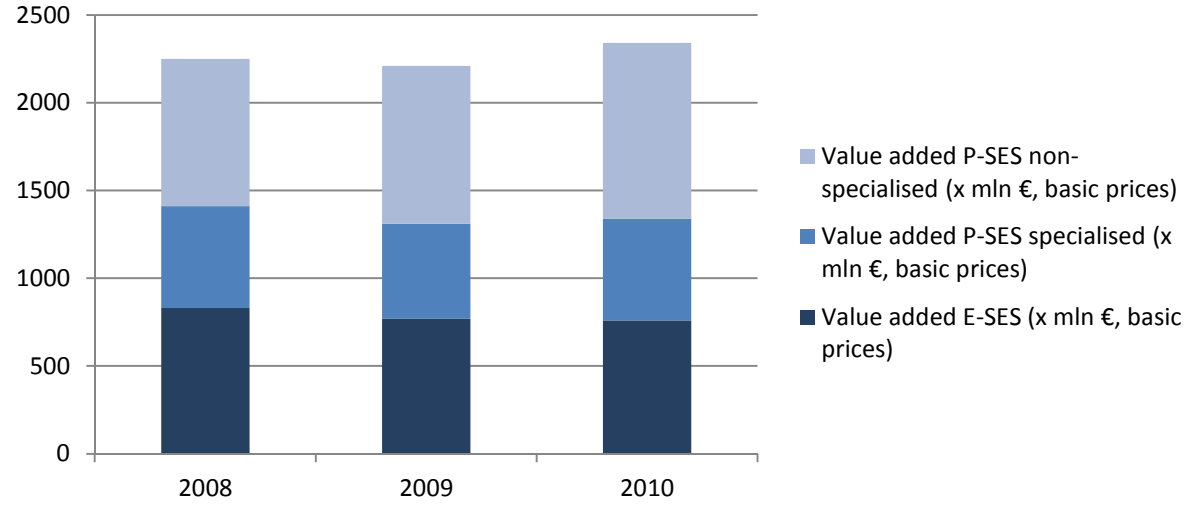


Figure 2 shows that the overall value added (current prices) in the SES has been slightly increasing. The increase was 4% over the period 2008 – 2010, which is low compared to the rise in employment we've seen in figure 1. In contrast to employment, the driving force of growth in value added were the non-specialised companies of the P-SES (19% growth over the period 2008 – 2010), as the specialised companies in the P-SES where stable (0% change) and the companies in the E-SES had a negative growth of 11% over the same period.

The growth in employment of the specialised companies in the P-SES seems to contrast the developments in production and value added, as it indicates that more people produce less and create less value added. These mirror image developments could be the result of a decrease in price of SES products (e.g. due to increased competition and less demand), which directly affects the production and value added figures, while employment figures are more likely to be less directly affected by increased competition and less demand (time lag, labour market is more rigid) . Alternatively, this development could be caused by different developments in capital and labour intensive components of

the SES. For instance, the observed pattern can be the result of growth in labour intensive components of the SES and decline in capital intensive parts of the SES. By zooming in on the different parts of the SES, the SES Radar 2013, that will appear in October 2013, will shed further light upon these developments.

5. International trade in goods

Figure 4: Import, export and the trade balance of the SES (goods)

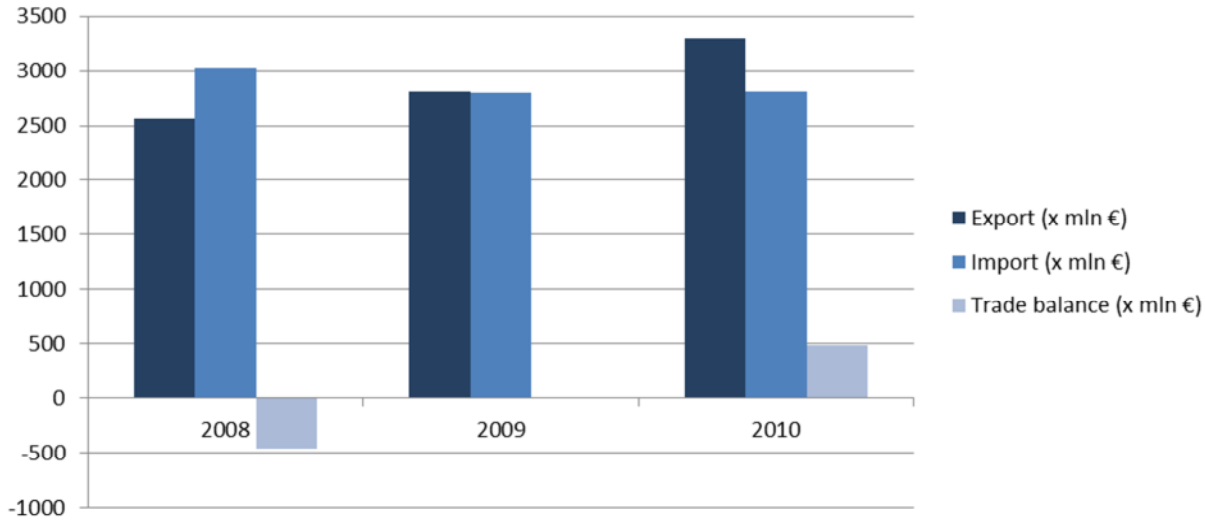
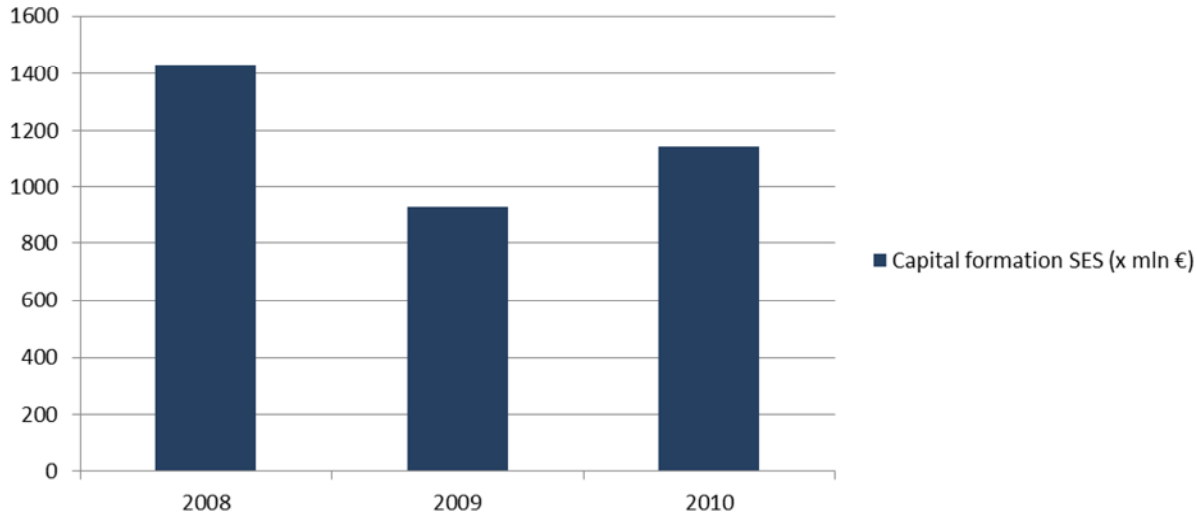


Figure 4 shows that import has been slowly decreasing (7 % decrease over the period 2008 – 2010), while export has been substantially increasing (29% increase over the period 2008 – 2010). This has led to a positive trade balance (goods) in 2010, while it was still negative in 2008. By zooming in on the different parts of the SES, the SES Radar 2013, that will appear in October 2013, will shed further light upon these developments.

6. Capital formation

Figure 5: Capital formation (in mln €) in the SES:



We see that capital formation figures show a more erratic pattern than the other economic indicators. A large decrease (-35% between 2008 and 2009) is succeeded by a large increase (23% between 2009 and 2010). The effect of the crisis on capital formation in the SES is substantial in 2009.

7. Other activities this year

This compact overview has been restricted to 2008 – 2010 figures. Later this year we will extend upon this work in two ways. First, we will extend the time series by providing figures up till 2011. Second, we will zoom in further in the different economic figures by looking at the different types of activities (e.g. installation, R&D) and different types of sustainable energy products that these companies are involved with (e.g. solar, wind, energy saving). A full report in which the time series is extended to 2011 will be published in October 2013.

Annex 1

Key indicators for the Sustainable Energy Sector			**2008**	**2009**	**2010**
Indicator	*Sector*	*fte (rounded)*			
Employment	SES		16800	17800	18500
	E-SES		2400	2600	2600
	P-SES (specialised)		6600	7000	7400
	P-SES (non-specialised)		7900	8200	8500
		euro, mln, rounded			
Production	SES		5570	5560	5900
	E-SES		1070	1180	1320
	P-SES (specialised)		1840	1820	1760
	P-SES (non-specialised)		2660	2560	2820
Value added	SES		2250	2210	2340
	E-SES		830	770	760
	P-SES (specialised)		580	540	580
	P-SES (non-specialised)		840	900	1000
Exports	SES		2560	2810	3300
Imports	SES		3020	2800	2810
Capital formation	SES		1430	930	1140