Position of the Netherlands in the emerging green economy

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Executive summary

This short paper analyses the competitive position of the Netherlands in the emerging green economy based on trade, output and patenting data covering 75 sectors. The data refer to the period 2005-2010. The position of the Netherlands is compared to that of five small-country, export-oriented direct competitor economies, and to nine other large economies. The analysis shows that the Netherlands as a whole is lagging behind in terms of green innovation. However, this general conclusion hides large discrepancies. The Netherlands is positioned to fare well in the green economy in a number of sectors, including food production and processing, grain production and processing, and the manufacture of communications equipment. Several sectors are also shown to have a strong present-day comparative advantage but to be 'greening' through innovation at too slow a pace, putting that advantage at risk. The basic chemicals sector is one of these, and deserves particular attention because of its relatively large size and therefore importance within the Dutch economy.

Outline

Tables and Figures

1 Introduction

The challenges posed by climate change and other pressing environmental issues demand a transition to a greener economy. The economic changes needed to tackle these problems are likely to require more than simply expanding the environmental goods and services sector. Rather, the creation of a green economy will affect not just a few sectors but the product mix and production processes of virtually the whole economy (Stern 2010). This will entail sectoral shifts and changes in comparative advantage that inevitably imply winners and losers. It is therefore crucial for governments to understand where each country stands in the emerging global green race. However, to date there is little evidence about who the winners of the global "green race" might be.

This paper aims to provide policy makers and other stakeholders in the Netherlands with a clearer understanding of the strengths and weaknesses of sectors in the Netherlands in the emerging green economy. It does this by applying a previously-developed framework[1] for measuring green competitiveness to data for 75 sectors in the Netherlands. It compares the situation of the Netherlands in these sectors to 14 other countries, including six direct competitors with the Netherlands (Denmark, Ireland, Belgium, Sweden, Finland and Norway) and eight large economies (China, France, Germany, Italy, Japan, South Korea, the United Kingdom and the United States).

We find that the overall performance of the Netherlands in terms of green innovation is weak when compared both to large innovative economies such as Germany and Japan but also to its close competitors such as Sweden and Denmark. The Netherlands has a relatively small number of sectors with a rapid rate of green innovation and a relatively large number of sectors with a slow rate

[1] Fankhauser, F, A Bowen, R Calel, A Dechezlepretre, D Grover and M Sato (2013) 'Who will win the green race? In search of environmental competitiveness and innovation,' forthcoming in *Global Environmental Change*.

of green innovation. The Netherlands enjoys a strong green competitive position in several sectors: food processing and production, grain processing and production, and manufacturing of radio and television equipment. Several other sectors stand out as having a strong present-day comparative advantage that may be at risk by an inadequately fast rate of green conversion. Of particular concern is the Dutch basic chemicals sector.

2 Analytical framework

Extending the work of Fankhauser et al (2013) to the Netherlands, we measure a sector's green competitiveness through three distinct indicators of this concept: (1) the current comparative advantage of the sector in global trade, (2) the current amount of green innovation activity in the sector, and (3) the current size of the sector in terms of output. Comparative advantage in global trade measures current sector performance while green innovation is taken as a barometer for competitiveness in the future green economy. We then combine the three indicators through descriptive statistics and graphical analysis, and identify which sectors in the Netherlands are likely to be 'leaders' and 'laggards' in the emerging green economy.

2.1 Current comparative advantage

The current comparative advantage of a sector in a country is measured with a revealed comparative advantage (RCA) index. The RCA index measures the comparative advantage or disadvantage of each country-sector in global trade. It is commonly referred to as the Balassa index (Balassa, 1965). The value of the index for each country sector is given by:

$$RCA_{is} = \frac{e_{is}}{\sum_s e_{is}} / \frac{\sum_i e_{is}}{\sum_s \sum_i e_{is}}$$

where *RCA* is the index value calculated for each country *i* and sector *s*. The numerator measures the share of exports in a country-sector relative to total exports from that country. The denominator is the share of exports by the sector globally relative to total exports globally, for all countries in the sample. The

index effectively captures a country-sector's comparative (dis)advantage *relative to the other countries in the sample*. The index is calculated using international trade data from the United Nations (Comtrade), *excluding re-exports*.

2.2 Green innovation index

The green innovation index (GII) is the second green competitiveness indicator. It measures the speed at which the greening of the sector is taking place. It captures, for example, how quickly technological progress is leading renewables to overtake conventional generation in the electric power sector. Measuring the rate of greening in this way is consistent with the view that 'creative destruction' is the engine of transformative growth (Dosi et al 1988; Malerba 2007). As with the RCA index the green innovation index produces a value for each country-sector:

$$GII_{is} = \frac{p_{is}^{G}}{p_{is}} / \sum_{i} \frac{p_{is}^{G}}{p_{is}}$$

On the right-hand side p^{G}_{is} captures the number of green patents and p_{is} captures the total number of patents in country *i,* sector *s*. This is put into proportion, in the denominator, with the proportion of green patenting to all patenting for all countries in the sample. Normalising in this way against broader patenting activity is important because it corrects for idiosyncrasies in patenting behaviour in particular sectors or countries. Indeed, evidence shows that the propensity to patent differs widely across sectors (Cohen et al. 2000). The index is based on a dataset that describes patenting activity by over 450,000 firms worldwide (see Fankhauser et al., 2013, for details). The advantages and limitations of patent data as a measure of innovation have been described at length in the literature (see OECD, 2009, for a recent overview). For our purpose, there are two main advantages. First, they are available at a highly technologically disaggregated level, which allows us to distinguish clean and non-clean innovations in a very precise way. For example, we can identify innovations related to electric, hybrid and hydrogen vehicles in the auto industry. R&D investment cannot be disaggregated in such a way. Second, although patents are typically used more by

large companies, R&D is usually not reported at all for small and medium sized firms. However, readers should keep in mind that only a small share of companies use patents as a means of protection against imitation. In a small economy like the Netherlands, this means that the number of patents on which our statistics are based might be small in some sectors. Hence, we caution against inferring too much of our results in sectors with overall small patenting activity.

2.3 Sector size

Sector size measures the current importance of the sector to the country's economy, in absolute terms, based on data come from the United Nations Industrial Statistics database. Although we expect that the relative size of sectors within a country will shift and change as a greener economy emerges, we use current sector size as a proxy for how important the sector might be in the future. The assumption here is that current output is correlated with future output. Indeed, rather than a simple expansion of a country's present-day environmental goods and services sector (BIS 2011; EBI 2012; ECORYS 2009; Ernst & Young 2008), we expect each sector to become progressively greener 'from within' through production process changes (e.g. producing electricity with renewables rather than with coal) and through a shift toward producing cleaner final goods (e.g. low-emissions vehicles taking the place of petrol-fuelled vehicles in automobile manufacturing).

3 Application to sectors in the Netherlands

We apply the framework to the Netherlands data and contrast the performance of sectors in the Netherlands against international competitors.

3.1 Country-level analysis

3.1.1 Descriptive statistics

We start by comparing the overall green competitiveness position of the Netherlands against nine large-country economies and six small-country, export-

oriented economies that the Netherlands competes with directly. Table 1 describe the position of the 75 ISIC 3-digit sectors in aggregate.

Table 1: Cross-country comparison of aggregate green competitiveness

	Green innovation				RCA	Sector aggregates			
Country	**Mean GII**	**Mean GII, output weighted**	**Median GII**	**Green patent share (mean %)**	**Number of sectors with trade advantage (RCA > 1)**	**Number of sectors with GII > 1**	**Number of sectors with GII = 0**	**Output in sectors with GII > 1 (% of total)**	**Output in sectors with GII = 0 (% of total)**
Japan	2.12	1.84	1.41	8.41	24	51	10	85.56	0.69
Germany	1.47	1.47	1.03	7.90	29	38	16	54.02	8.22
Korea	1.46	1.50	1.18	7.05	20	44	15	71.22	0.38
USA	1.31	1.09	1.00	5.52	28	34	9	52.83	0.10
Finland	1.20	1.13	0.25	5.03	23	19	38	38.34	16.76
France	1.17	1.01	0.74	8.03	33	27	25	35.49	23.64
Switzerland	1.10	1.19	0.91	4.82	33	33	21	62.37	2.48
UK	0.95	0.98	0.57	5.62	22	20	28	34.74	19.11
Italy	0.87	0.72	0.42	5.22	30	18	24	26.35	6.63
Norway	0.86	0.72	0.00	6.66	19	17	50	21.51	39.35
Sweden	0.73	0.74	0.00	5.93	27	17	42	27.14	26.98
Denmark	0.69	0.86	0.00	5.79	29	19	50	40.62	29.15
Belgium	0.67	0.52	0.00	4.17	24	15	46	14.45	50.34
Netherlands	0.52	0.72	0.00	3.80	23	17	46	25.57	28.92
Ireland	0.43	1.38	0.00	2.61	15	8	63	22.45	45.81

The first column shows that the Netherlands ranks 14th out of 15 countries in green innovation activity when green innovation is measured as the mean GII across the 75 sectors. This picture remains largely the same when mean GII is weighted by country output in the second column, and in the fourth column giving the mean percent share of green patents across all sectors in the country.

The Netherlands has roughly the same number of sectors with a comparative advantage as the mean of all comparator countries: 23 versus 25.5.

The picture of the Netherlands lagging as a whole is reinforced by the sector aggregate measures in the rightmost columns. The Netherlands ranks

consistently within or around the bottom quarter of the ranking. It has a relatively small number of sectors with a rapid rate of green conversion (only 17 sectors with a GII greater than 1) and a relatively large number of sectors with a slow rate of green conversion (46 sectors with a GII of zero). Approximately 25.5 percent of Dutch output occurs in sectors with a GII greater than one. This compares the leading large economy, Japan, where 85.5 percent of output occurs in rapidly greening sectors, and the leading small-country economy, Finland, where the number is 38.3 percent of output.

Table 1 also gives some important insights for the countries best positioned to lead in the green race. The clear leader by the GII index alone is Japan, relative both to all 15 countries in the sample and to the largest economies[2]. Japan is the only country with a median green innovation index that is greater than one. It has 51 sectors with above-average green innovation, the highest number of any country by some distance. These sectors account for 85 percent of Japan's manufacturing output compared with 25 to 50 percent for most other countries. Japan's leading position in green manufacturing appears to be long-lasting and has been observed elsewhere in prior work on green competitiveness in the 1990s (Voituriez and Balmer 2012).

3.1.2 Graphical analysis

We now provide some graphical analysis of the numbers behind Table 1. In the following bubble charts, the comparative advantage and the green innovation indexes run along the chart axes and provide the basis for establishing a sector's green growth potential. The size of the bubbles reflects the size of the sectors, which conveys the sector's future importance. For both the RCA and the GII, the data have been scaled in such a way that the sample average across countries is one.[3] Therefore, if a sector scores between zero and one this indicates below-

[2] Note that this result does not stem from Japan's "patenting culture" – patent numbers is or has been an explicit performance indicator at companies like Mitsubishi Heavy Industries, for example – as the green innovation indicator corrects for such country-level differences by focusing on the *share* of green patents within a country.

[3] For presentational purposes, the scales for both the RCA index (x-axis) and the GII index (y-axis) are adjusted to make the distributions (which are right-skewed) appear symmetric.

average performance; if a sector scores above one, this indicates above average performance. Figure 1 provides an example bubble chart.

Generally speaking, green competitiveness increases as one moves to the top and right of the chart.

- Sectors in the top-right quadrant currently enjoy a comparative advantage and are also performing well in terms of green innovation. These sectors are thus likely to perform well in the future green economy.
- At the other end, sectors in the bottom-left quadrant currently enjoy no comparative advantage and are performing badly in terms of green innovation. They are the obvious weak sectors.
- Sectors in the bottom-right corner currently enjoy a comparative advantage, but are not converting to the green economy. Therefore their current positions might be threatened as greener growth emerges.
- Sectors in the upper-left corner do not currently enjoy a comparative advantage. However, their current strong performance in terms of green innovation suggests that they could well become winners in a greener economy. From an industrial policy point of view, some of the best competitiveness opportunities for the Netherlands lie in this quadrant.

Figure 1: Interpretation of sector green comparative advantage

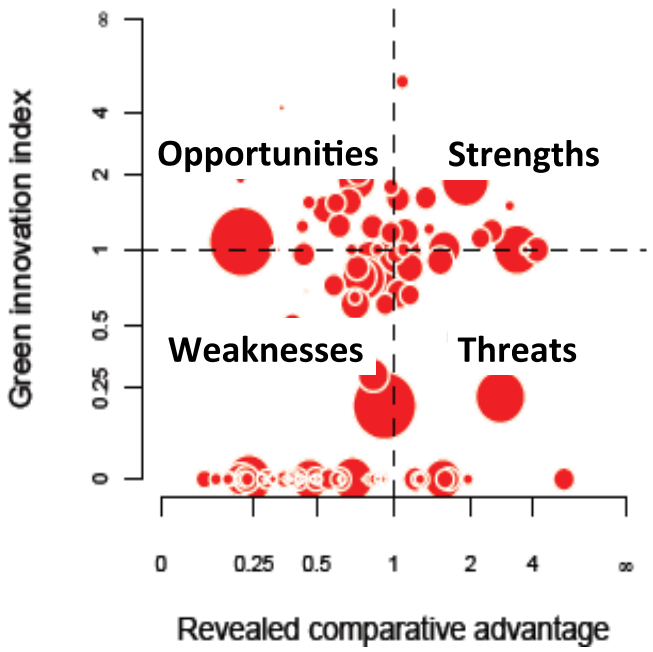


Figure 2 graphically analyses green competitiveness of the Netherlands against its direct competitor countries, while Figure 3 shows the Netherlands together with large economies analysed by Fankhauser et al. (2013). For clarity it depicts only the 15 biggest sectors in each country. Bubbles in the upper right hand quadrant indicate green competitive strength, bubbles in the lower left hand quadrant indicate green competitive weakness, and the size of the bubble indicates sector importance to the country. Similar figures in the Appendix depict the position of all sectors.

The graphical analysis shows that the Netherlands enjoys a strong green competitive position in three of its largest 15 sectors. This position is roughly comparable to Ireland, Finland, Norway and the UK. The Netherlands enjoys a stronger position than Belguim and a weaker position than Denmark.

Bubble size is important here also: some of the biggest sectors in Denmark, Ireland and Sweden sit squarely within the 'green competitive strength' quadrant. This means these countries biggest sectors are well-positioned to lead in and exploit the opportunities presented by the emerging green economy. For the Netherlands by contrast, the sectors in that quadrant are medium-sized. More concerning however is that the Netherlands' largest sector (ISIC 241: Manufacture of basic chemicals) sits in the bottom right quadrant. This indicates that the sector currently enjoys a strong comparative advantage internationally but that its rate of green conversion indicated by its share of green patenting activity is slow, putting this position at future risk.

Importantly, we observe a high level of green innovation not only in the traditional leaders in clean technologies such as Japan and Germany, but also in emerging economies such as China and Korea. These countries have strong levels of green innovation in sectors in which they currently do not enjoy a comparative advantage, suggesting they could be well positioned in a future green economy.

Figure 2: Netherlands' position against direct competitor countries (15 biggest sectors)

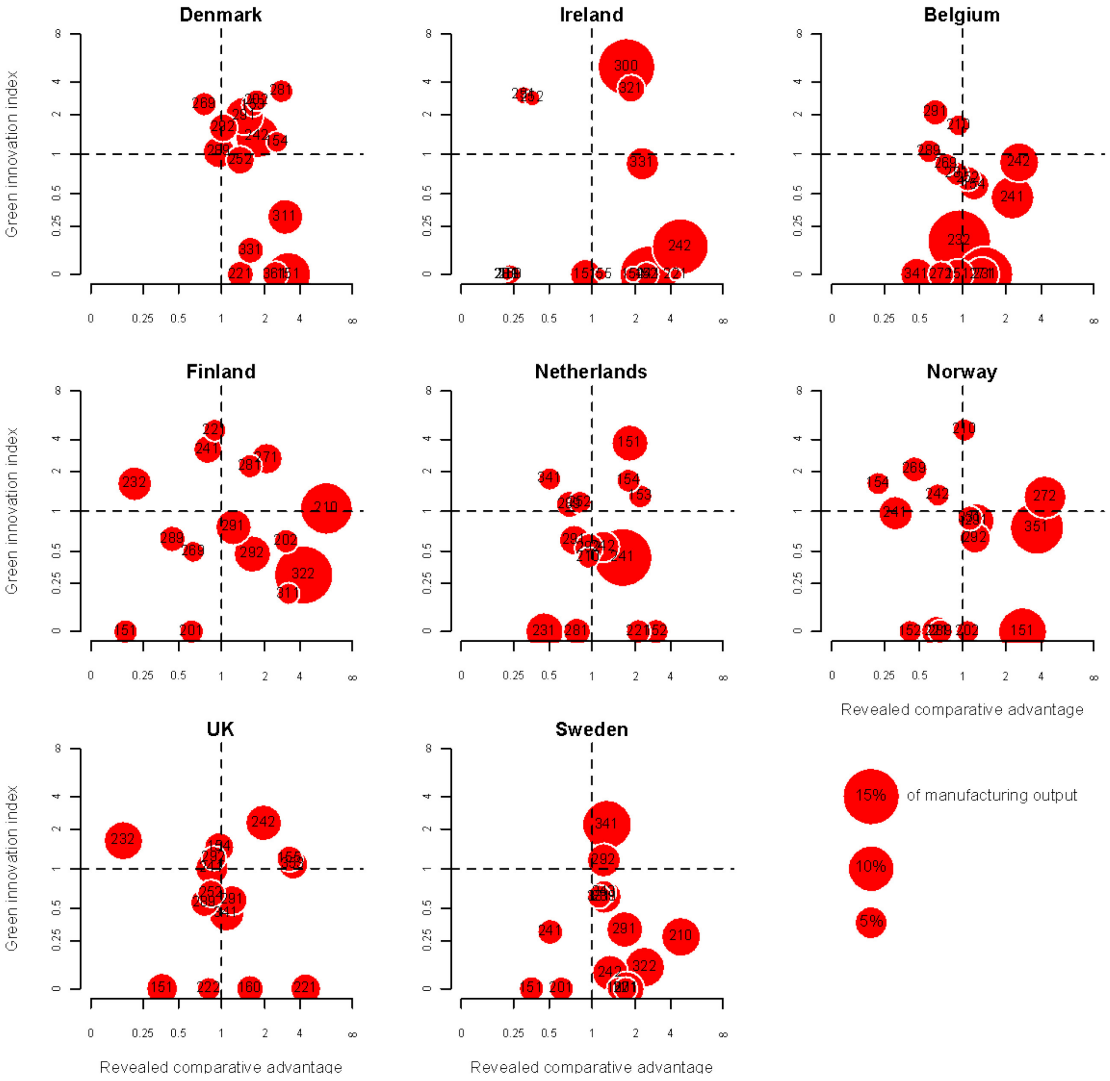
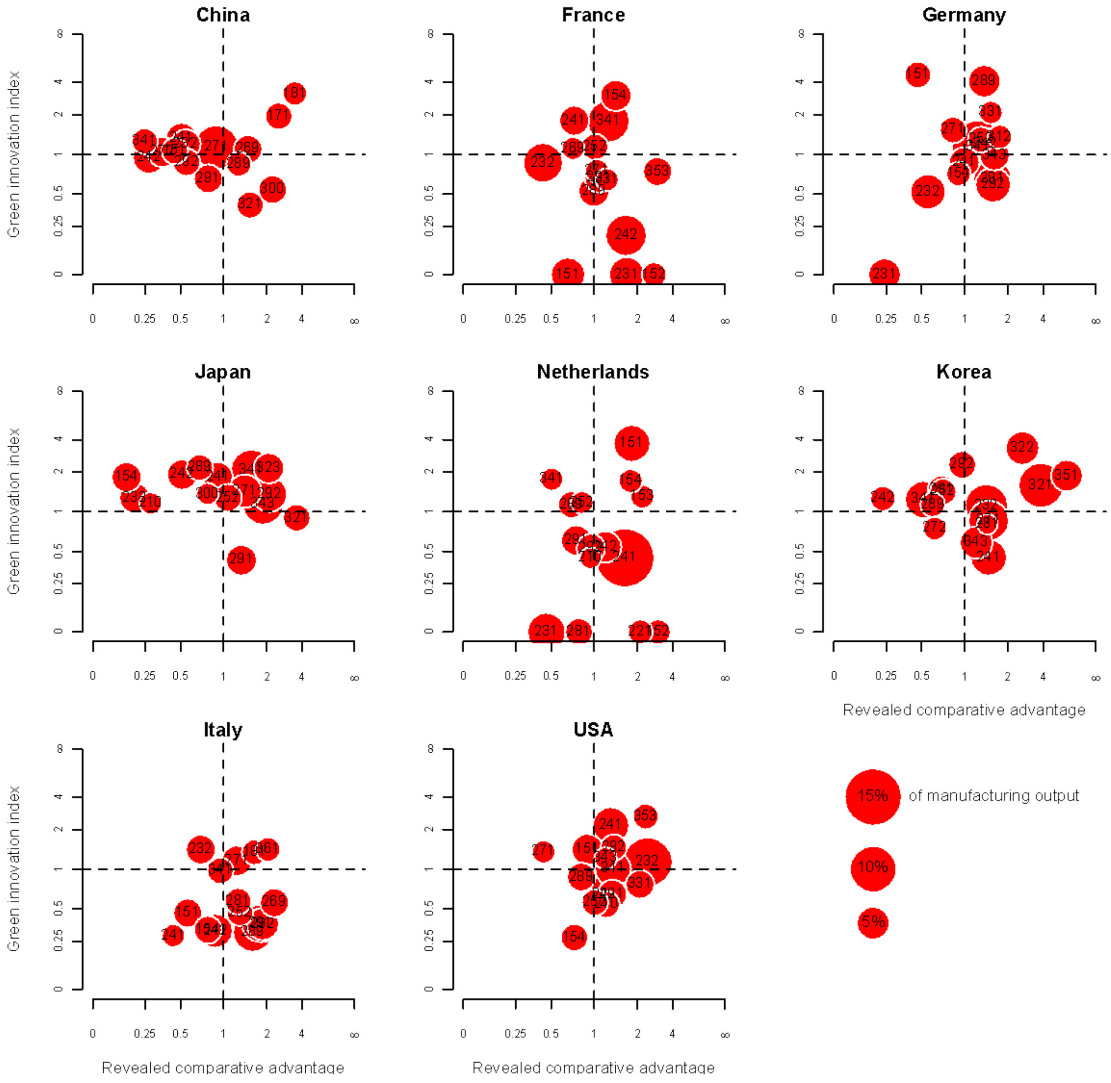


Figure 3: Netherlands' position against large economies (15 biggest sectors)



3.2 Sector analysis

3.2.1 Descriptive statistics

Table 2 gives the indicators of green competitiveness (GII and RCA) for priority sectors in the Netherlands. The 'WIOD' column ties the ISIC sector classification to NACE codes used in the Netherlands. The top performing sector in terms of green patent share and the GII is food production (Production, processing and preservation of meat, fish, fruit, vegetables, oils and fats). Approximately 5.41 percent of all patents in this sector are green patents, giving it a GII score of 4.13. This sector also performs well in comparative advantage terms. This sector is a

'strength' in green competitiveness terms and is well positioned to thrive in the future green economy.

Table 2: RCA and GII for priority sectors in the Netherlands

Sector	ISIC3 code	Corresp. NACE	Green patent share	Green patent indicator	RCA	Output
Growing of crops; market gardening; horticulture	011	011	0%	0	3.10	N/A
Farming of animals	012	014	1.49%	0.16	2.65	N/A
Forestry, logging and related service activities	020	02	0%	0	0.92	N/A
Production, processing and preservation of meat, fish, fruit, vegetables, oils and fats	151	10	5.41%	4.13	1.81	6.30%
Manufacture of grain mill products, starches and starch products, and prepared animal feeds	153	106	3.74%	1.46	2.16	2.66%
Manufacture of coke oven products	231	191	0%	0	0.47	6.77%
Manufacture of refined petroleum products	232	192	0%	0	0.75	0%
Processing of nuclear fuel	233	2446	0%	0	2.53	0%
Manufacture of basic chemicals	241	201	2.35%	0.42	1.62	15.87%
Manufacture of other chemical products	242	205	1.78%	0.58	1.19	4.60%
Manufacture of man-made fibres	243	131	4.17%	0.86	0.84	0.39%
Manufacture of rubber products	251	221	0%	0	0.50	0.24%
Manufacture of general purpose machinery	291	281	8.38%	0.68	0.76	4.30%
Manufacture of special purpose machinery	292	289	2.47%	0.55	0.95	3.80%
Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy	322	263	0%	0	0.95	0.07%
Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goo	323	263	2.67%	1.10	1.17	0.11%
Manufacture of motor vehicles	341	291	21.52%	1.94	0.51	2.44%
Production, collection and distribution of electricity	401	351	0%	1.00	5.91	N/A

We also see from Table 2 that other sectors with above average performance in both the GII and RCA include the manufacture of grains (Manufacture of grain mill products, starches, starch products, and prepared animal feeds) and the manufacture of television and radio receivers and associated equipment. This sector benefits in particular from the high patenting activity of Philips in LED.

Several of the priority sectors also fall into the 'threats' quadrant in our analysis. These sectors include crop growing (Growing of crops; market gardening; horticulture), processing of nuclear fuel, manufacture of basic and other chemical products, and the production, collection and distribution of electricity.

These are sectors with strong comparative advantage but which are greening slowly or not at all and therefore risk losing this advantage.

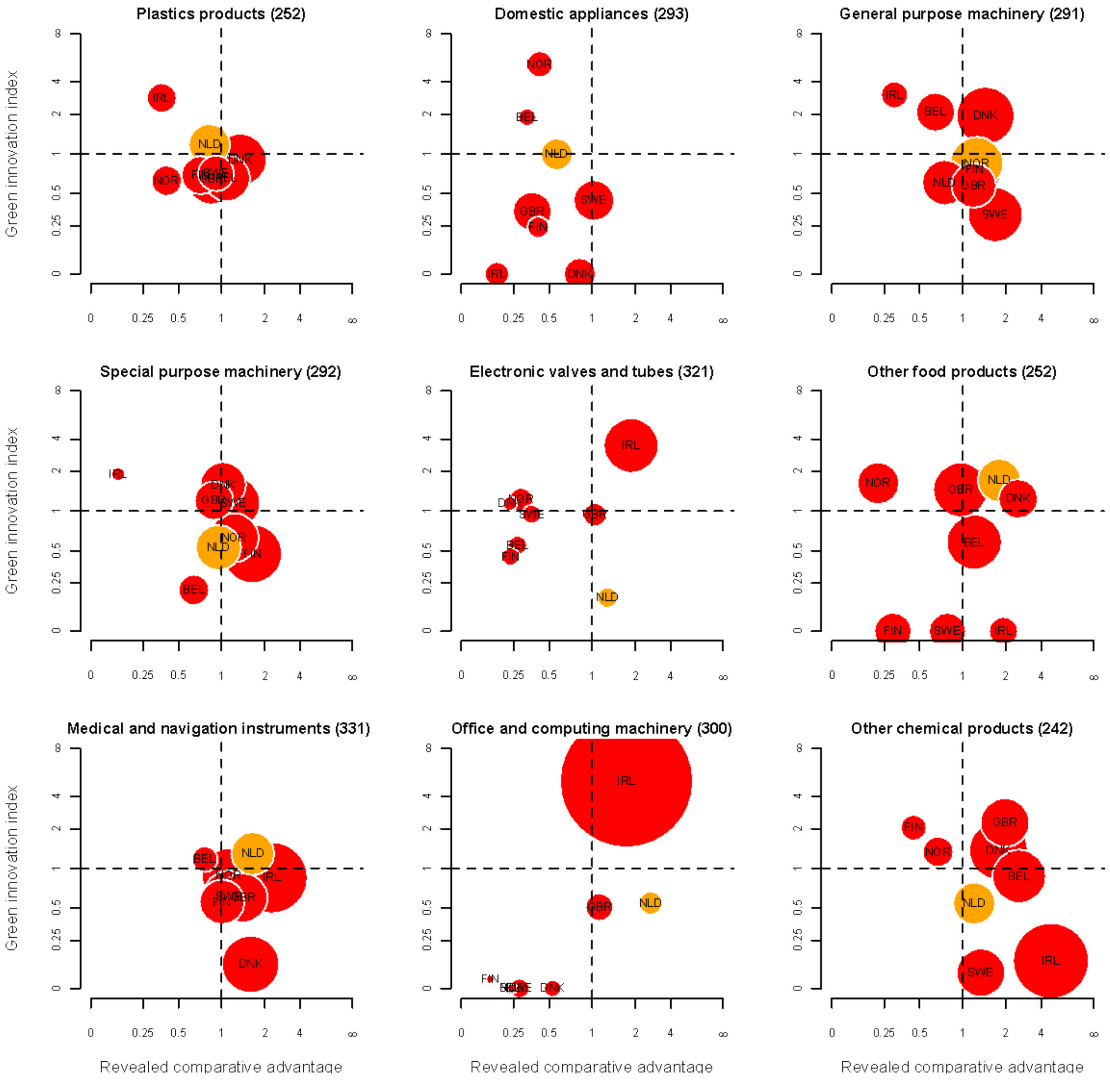
Finally, some sectors present a clear opportunity to maintain and expand market share in the future through greening. These include motor vehicles production and manufacture of plastic products.

3.2.2 Graphical analysis of green competitiveness by sector

The data can also be arranged to show which countries enjoy a green competitive advantage within the sectors the Netherlands might consider to be priority sectors. In Figure 4, we explore nine of these sectors: plastic products, domestic appliances, general purpose machinery, special purpose machinery, electronic valves and tubes, food products, medical and navigation instruments, office and computing machinery, and chemical products. Note that for presentational purposes, the size of bubbles in Figure 4 represents the size of the sector in each country *relative* to the size of the sector worldwide – so that small sectors globally do not show only tiny dots.

Figure 4 shows that the Netherlands is likely to preserve its current strong position vis-à-vis its direct competitors in food products and in medical and navigation instruments. There are opportunities for Dutch companies in plastic products and domestic appliances. The other five sectors – general and special purpose machinery, electronic valves and tubes, office and computing machinery, and chemical products – might on the contrary be at risk.

Figure 4: Netherlands' position in priority sectors (comparison against direct competitor countries)



4 Conclusions

This paper extends the analysis in Fankhauser et al (2013) to consider the competitive position of the Netherlands in the emerging green economy. Overall, we find that the Netherlands seems to be lagging behind in terms of green innovation. While the Netherlands currently enjoys a comparative advantage across a range of sectors, a relatively small number of these sectors are greening at a rapid rate. Therefore, although the Netherlands is positioned to fare well in the green economy in a number of sectors – including food production and

processing, grain production and processing, and the manufacture of communications equipment – several sectors are putting their present-day comparative advantage at risk by a sluggish green innovation activity. The basic chemicals sector is one of these, and deserves particular attention because of its relatively large size and therefore importance within the Dutch economy. Importantly, some sectors present a clear opportunity to maintain and expand market share in the future through greening. These include motor vehicles production and manufacture of plastic products.

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6 Appendix

Table 3: RCA and GII for all 75 sectors in the Netherlands

Sector	Green patent share	Green patent indicator	RCA	Output
Growing of crops; market gardening; horticulture	0%	0	3.10	N/A
Farming of animals	1.49%	0.16	2.65	N/A
Forestry, logging and related service activities	0%	0	0.92	N/A
Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	0%	0	1.04	N/A
Mining and agglomeration of hard coal	0%	0	0.33	N/A
Mining and agglomeration of lignite	0%	0	0.07	N/A
Extraction of crude petroleum and natural gas	0%	0	0.02	N/A
Mining of non-ferrous metal ores, except uranium and thorium ores	0%	0	1.22	N/A
Quarrying of stone, sand and clay	0%	0	0.81	N/A
Mining and quarrying n.e.c.	0%	0	0.24	N/A
Production, processing and preservation of meat, fish, fruit, vegetables, oils and fats	5.41%	4.13	1.81	6.30%
Manufacture of dairy products	0%	0	2.91	2.96%
Manufacture of grain mill products, starches and starch products, and prepared animal feeds	3.74%	1.46	2.16	2.66%
Manufacture of other food products	2.81%	1.70	1.77	2.62%
Manufacture of beverages	0%	0	0.96	0.35%
Manufacture of tobacco products	0%	0	5.21	1.97%
Spinning, weaving and finishing of textiles	0%	0	0.24	0.22%
Manufacture of other textiles	2.67%	1.24	0.73	0.73%
Manufacture of knitted and crocheted fabrics and articles	0%	0	0.28	0.01%
Manufacture of wearing apparel, except fur apparel	0%	0	0.49	0.20%
Dressing and dyeing of fur; manufacture of articles of fur	0%	0	0.51	0%
Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness	0%	0	0.41	0.06%
Manufacture of footwear	0%	0	0.88	0.05%
Sawmilling and planing of wood	0%	0	0.12	0.09%
Manufacture of products of wood, cork, straw and plaiting materials	0%	0	0.32	1.07%
Manufacture of paper and paper products	2.13%	0.50	0.94	2.15%
Publishing	0%	0	2.09	2.84%
Printing and service activities related to printing	0%	0	1.09	2.04%
Reproduction of recorded media	0%	0		0.08%
Manufacture of coke oven products	0%	0	0.47	6.77%
Manufacture of refined petroleum products	0%	0	0.75	0%
Processing of nuclear fuel	0%	0	2.53	0%
Manufacture of basic chemicals	2.35%	0.42	1.62	15.87%
Manufacture of other chemical products	1.78%	0.58	1.19	4.60%
Manufacture of man-made fibres	4.17%	0.86	0.84	0.39%
Manufacture of rubber products	0%	0	0.50	0.24%
Manufacture of plastics products	5.32%	1.26	0.83	2.41%
Manufacture of glass and glass products	0%	0	0.53	0.42%
Manufacture of non-metallic mineral products n.e.c.	2.26%	0.23	0.40	1.72%

Manufacture of basic iron and steel	2.50%	0.75	0.78	1.83%
Manufacture of basic precious and non-ferrous metals	0%	0	0.48	1.03%
Casting of metals	0%	0		0.29%
Manufacture of structural metal products, tanks, reservoirs and steam generators	0%	0	0.79	3.55%
Manufacture of other fabricated metal products; metal working service activities	5.31%	1.11	0.71	3.38%
Manufacture of general purpose machinery	8.38%	0.68	0.76	4.30%
Manufacture of special purpose machinery	2.47%	0.55	0.95	3.80%
Manufacture of domestic appliances n.e.c.	7.21%	1.04	0.57	0.38%
Manufacture of office, accounting and computing machinery	0.97%	0.63	2.62	0.47%
Manufacture of electric motors, generators and transformers	20.30%	1.29	0.57	0.38%
Manufacture of electricity distribution and control apparatus	0%	0	0.57	0.28%
Manufacture of insulated wire and cable	7.10%	1.97	0.83	0.31%
Manufacture of accumulators, primary cells and primary batteries	0%	0	0.43	0.02%
Manufacture of electric lamps and lighting equipment	0%	0	0.89	0.34%
Manufacture of other electrical equipment n.e.c.	26.05%	2.02	0.58	0.39%
Manufacture of electronic valves and tubes and other electronic components	0.87%	0.16	1.27	0.51%
Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy	0%	0	0.95	0.07%
Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goo	2.67%	1.10	1.17	0.11%
Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, navigating and ot	3.97%	1.28	1.63	1.88%
Manufacture of optical instruments and photographic equipment	0%	0	0.57	0.14%
Manufacture of watches and clocks	0%	0	0.16	0.01%
Manufacture of motor vehicles	21.52%	1.94	0.51	2.44%
Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers	8.57%	1.11	0.98	0.67%
Manufacture of parts and accessories for motor vehicles and their engines	4.59%	0.48	0.39	0.42%
Building and repairing of ships and boats	0%	0	0.46	1.78%
Manufacture of railway and tramway locomotives and rolling stock	0%	0	0.16	0.04%
Manufacture of aircraft and spacecraft	0%	0	0.69	0.37%
Manufacture of transport equipment n.e.c.	0%	0	0.66	0.26%
Manufacture of furniture	0%	0	0.40	1.36%
Manufacturing n.e.c.	3.57%	1.20	0.50	0.38%
Recycling of metal waste and scrap	25.00%	1.42		0.17%
Recycling of non-metal waste and scrap	100%	3.75		0.38%
Production, collection and distribution of electricity	0%	1.00	5.91	N/A
Architectural, engineering and other technical activities	0%	1.00	0.27	N/A
Motion picture, radio, television and other entertainment activities	0%	1.00	0.17	N/A
Other service activities	0%	1.00	0.10	N/A

Note: N/A indicates data not available.

Figure 5: Netherlands' position against direct competitor countries (all sectors)

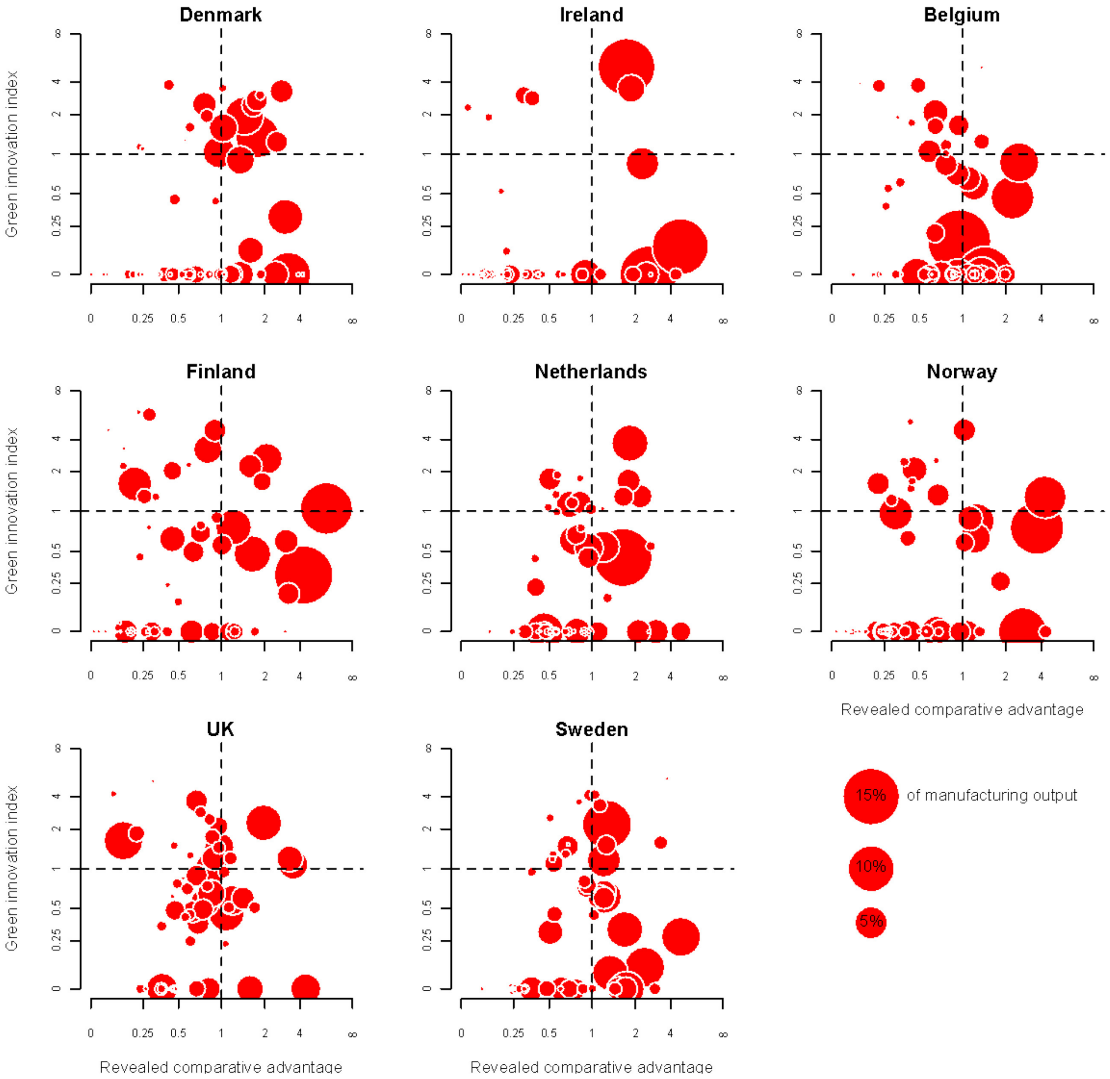

Figure 6: Netherlands' position against large economies (all sectors)