

High Council for Employment



Report 2010: Green jobs

Jan SMETS
Vice-chairman

28 September 2010

Estimates of green jobs

Broad concept¹: job content approach

- More than 26 million direct green jobs worldwide (UNEP, 2008)
- 5 million direct and indirect green jobs in the EU (WWF, 2009)

Narrow concept²: activity approach

Employment in the eco-industries in the EU

(thousands FTE)

	2000 ³	2004 ⁴	2006 ⁴	2008 ⁴
Direct employment	2,364	2,754	3,057	3,441
<i>p.m. direct employment in p.c. of total employment</i>	<i>1.3</i>	<i>1.5</i>	<i>1.6</i>	<i>1.7</i>
Indirect employment	1,320	n.a.	n.a.	n.a.

Sources: Ecorys, Ecotec, Ernst & Young, GHK.

¹ Jobs that contribute to preserving or restoring environmental quality (UNEP, 2008).

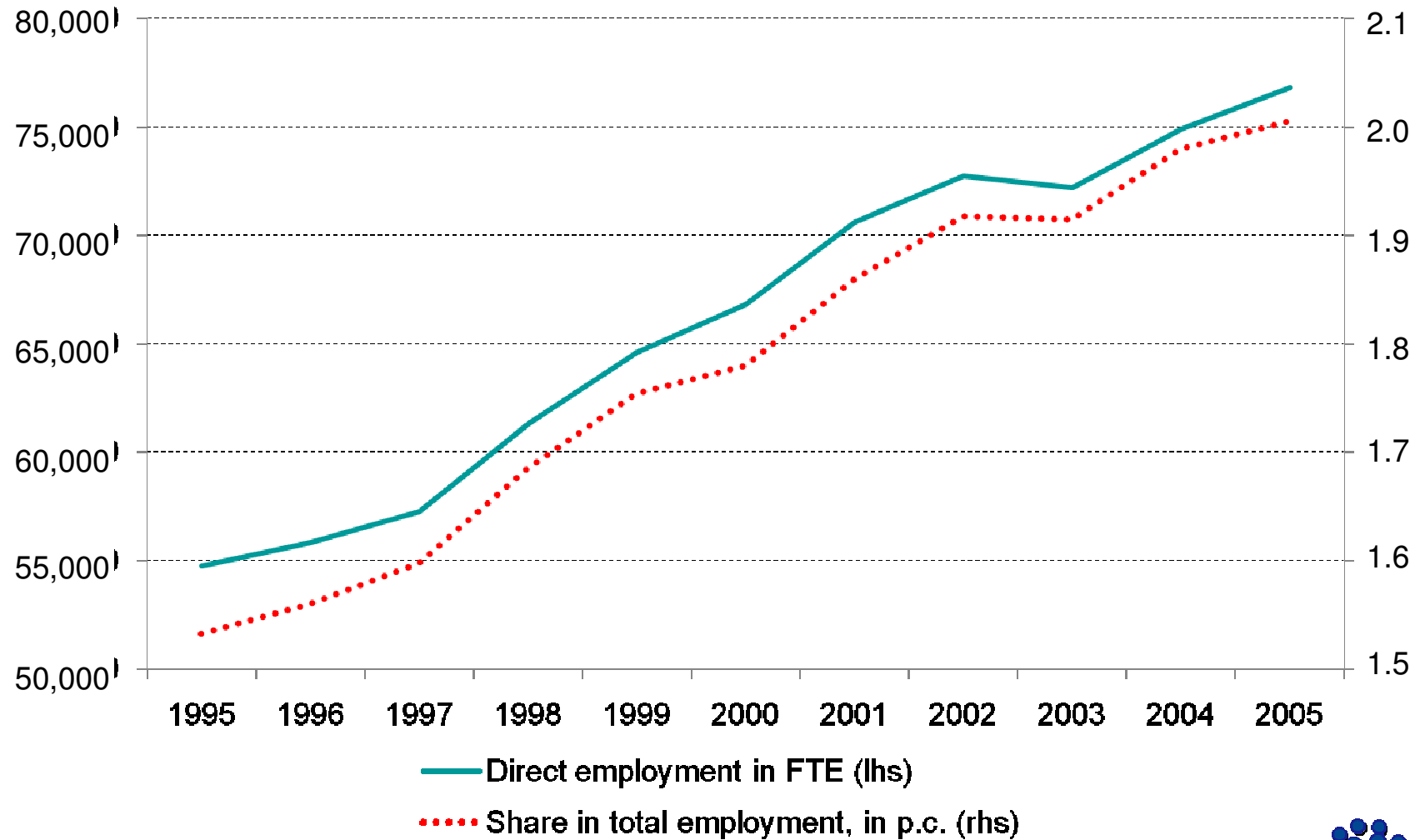
² Jobs in eco-industries, which include activities producing goods and services to measure, prevent, limit, minimize or correct environmental damage OECD/Eurostat, 1999).

³ GHK (2007).

⁴ Ecorys (2009).



Employment in the Belgian environment industry

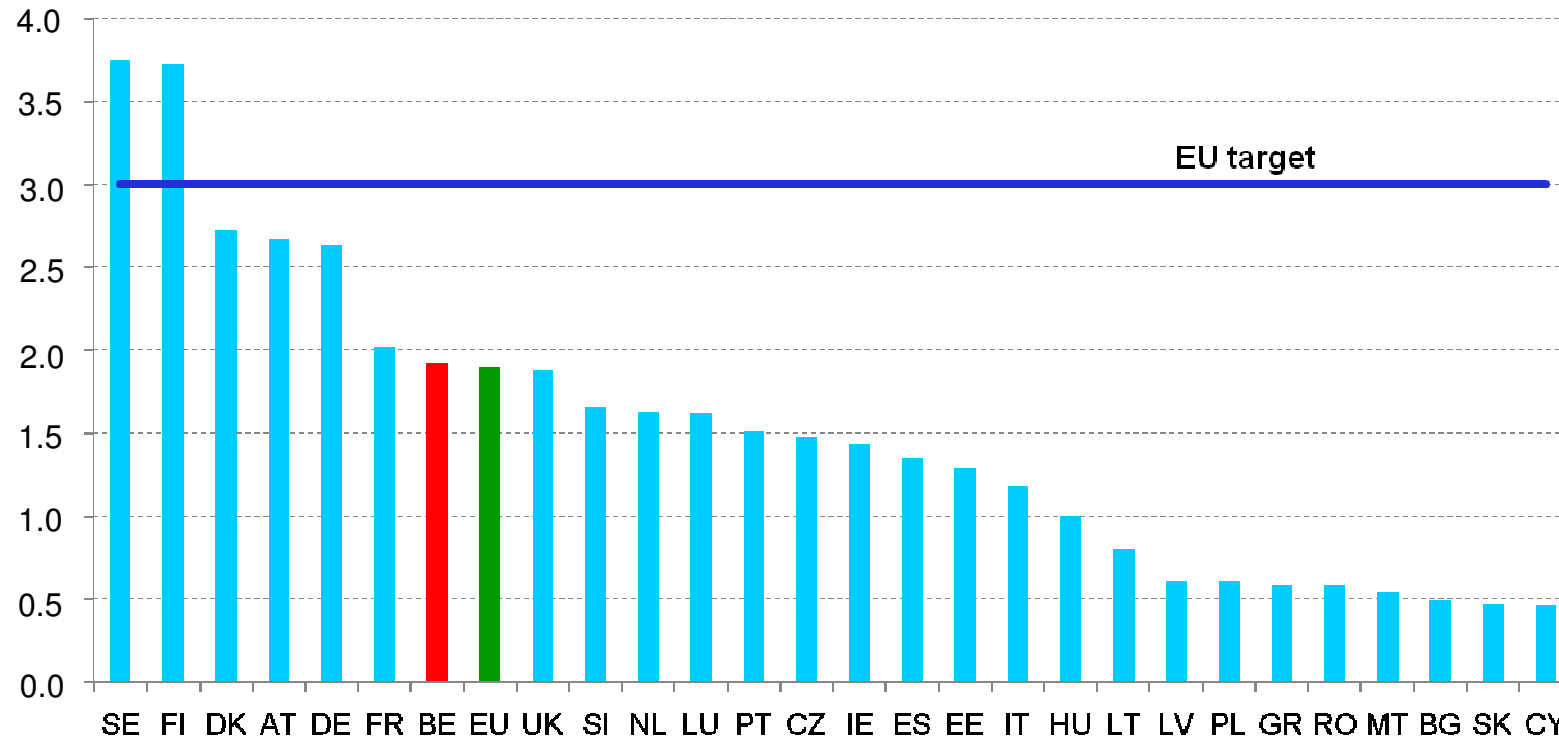


Source: Janssen and Vandille (2009).



Gross domestic expenditure on R&D in 2008¹

(percentage of GDP)



Source: EC.

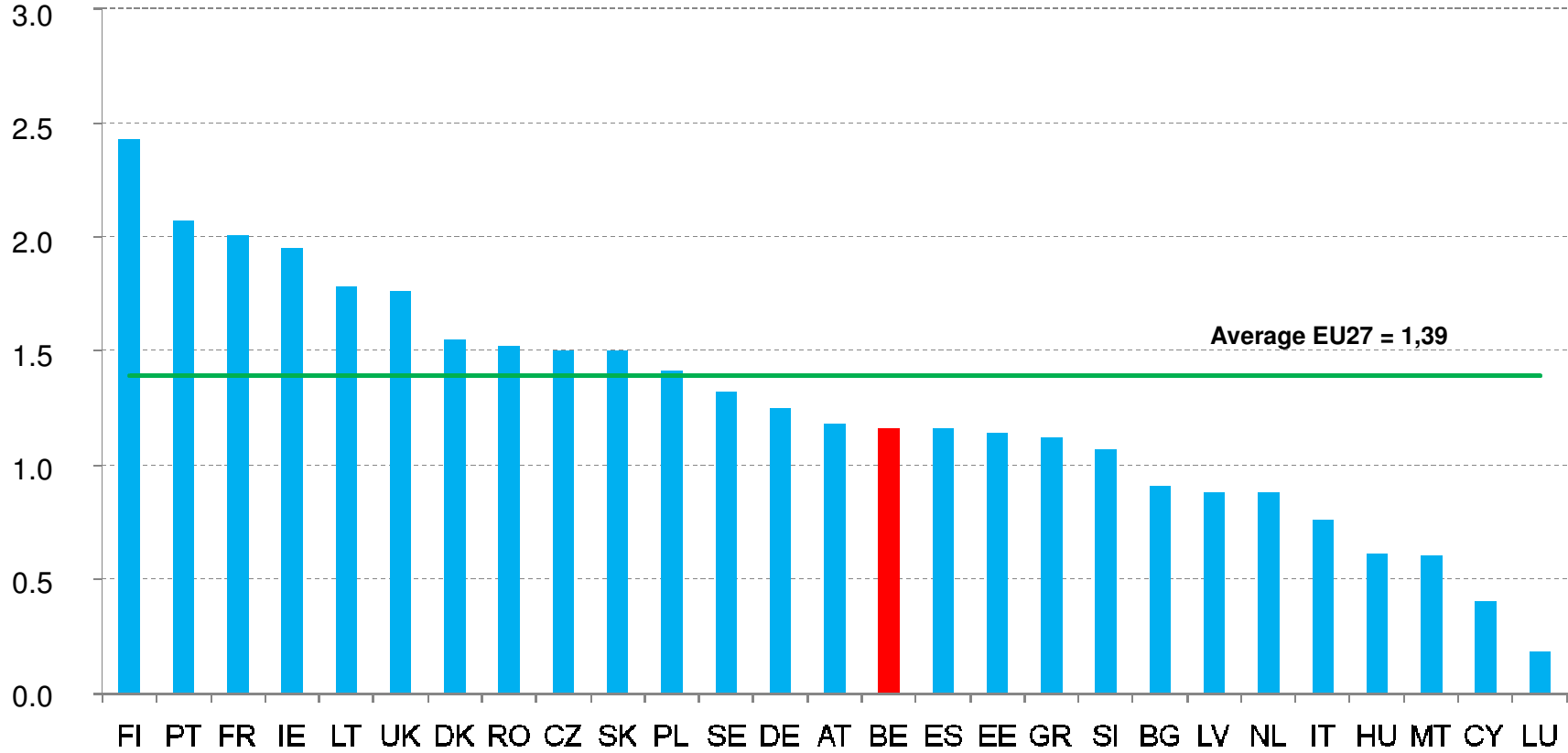
¹

2007 data for Greece.



Tertiary graduates in science and technology in 2008

(percentage of new graduates in the population aged 20 to 29)



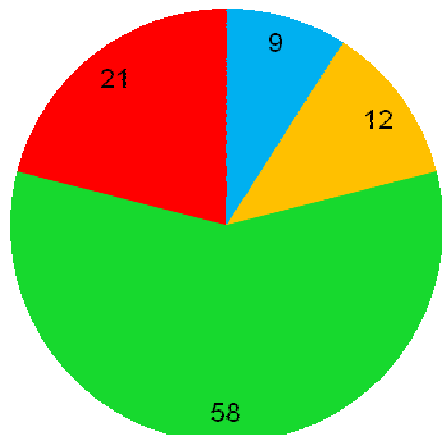
Source: EC.



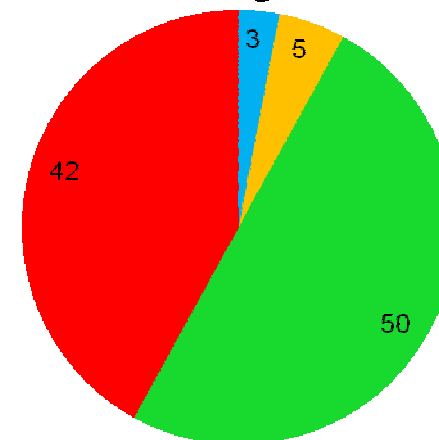
Environment-related employment by educational background and sectors, on average in five EU countries¹, in 2000

(percentages of the corresponding total)

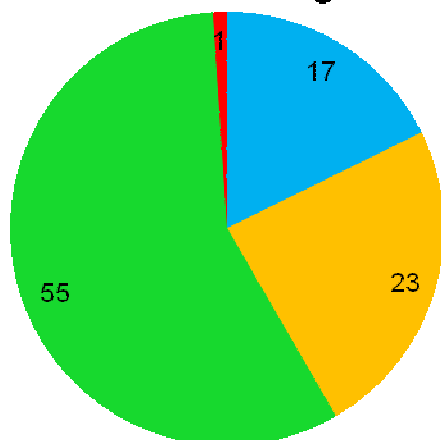
Eco-industries



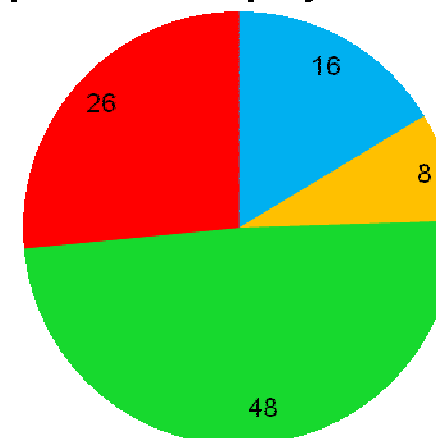
Waste management



Eco-consulting



p.m. Total employment



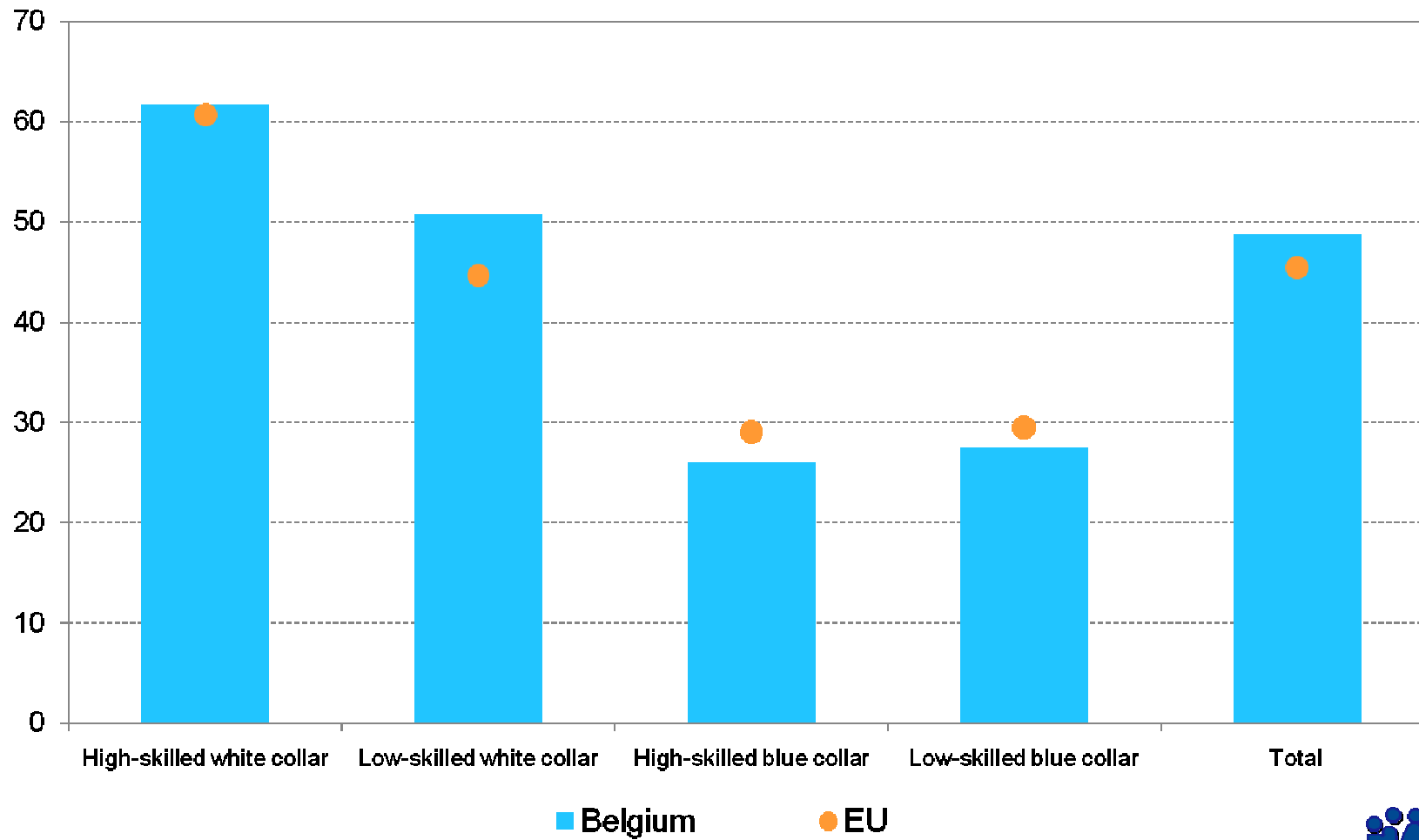
■ University
 ■ Advanced technical college
 ■ Upper secondary education
 ■ Lower secondary education



Source: OECD, based on Institut für Wirtschaft und Umwelt.
¹ Germany, Austria, Spain, Netherlands, Sweden.

Participation rate in training by occupation in 2007

(percentage of total)



Source: EC.

Comparison between the greening of the economy and the introduction of ICT

■ Similarities

- major challenge and several opportunities for the economic activity
- impact on the professional and private spheres
- non-homogenous expansion process, with no "end point"
- impact on employment difficult to estimate
- elimination of jobs, creation of new occupations, but mostly change in the content of the job (importance of education and training)
- teleworking

■ Differences

- reasons why these changes occur:
 - ✓ ICT: spurred on by economic agents individually
 - ✓ greening of the economy: under collective pressure by the international community
- increased intervention of the public authorities in the case of the greening of the economy
- fundamental changes expected for a more limited number of activities



Recommendations

- new skills for new jobs
 - defining future labour market needs: forward-looking observatory on occupations and skills
 - initial education: promoting and adapting technical and scientific education, teaching ecology and sustainable development
 - lifelong learning: developing and certifying "eco-training"
- easing and supporting the transition towards a green economy
 - adapting labour law to ease the changes
 - social support to restructuring
 - improving the match between the supply and the demand of labour (Public Employment Service)
 - considering the possibility of a complementary supply of skills through migration
 - looking after the quality of the new green jobs



High Council for Employment



Report 2010: Green jobs

Jan SMETS
Vice-chairman

28 September 2010