I.S.L.E.

INNOVATION IN THE TEACHING
OF SUSTAINABLE DEVELOPMENT IN LIFE SCIENCES IN EUROPE

"Report of the business survey of key sustainable development competences, knowledge and skills in working life – implications for Higher Education"

Klaus Wagner, Jannie van der Luit, Corinne Stewart

Building the bridges between
Higher Education and employment

- Implementation of Education for Sustainability (EFS) requires sustainable development-related **competences, knowledge and skills** identified by employers.

- **Not** available in the European or international context.

- Developing and exchanging thinking and practice on SD **in teaching**.

- Identifying the SD-related competences, knowledge and skills required by the **European workforce**

- Higher Education must **adapt their curricula**.

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- "ISLE Professional Practice and Sustainable Development" surveys in 2012

Sustainable Development : an employers' perspective

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# Contents of the report
SD: an employers' perspective

- Why is there a need for EFS?

- Framework and methodology for the surveys

- Results: SD in HEIs, SD in Companies… combined data

- What are the competences, skills and knowledge needed?

- Does Education meet the market needs and vice versa?

Sustainable Development, an employer's perspective

- **HEI survey (students, academics, institutional) to**:

* Clarify the needs of the labour market for SD competences, knowledge and skills ;

* Adjust the content of Higher Education programs in Europe

- **Company survey to:**

* Identify the SD competences, knowledge and skills

- **Statistical analyses, combination of HEI and Company results**

Is SD an issue in your company/organization?

Legend:
- YES (Y)
- NO (N)
- NO ANSWER

Pie chart values: 63%, 19%, 17%
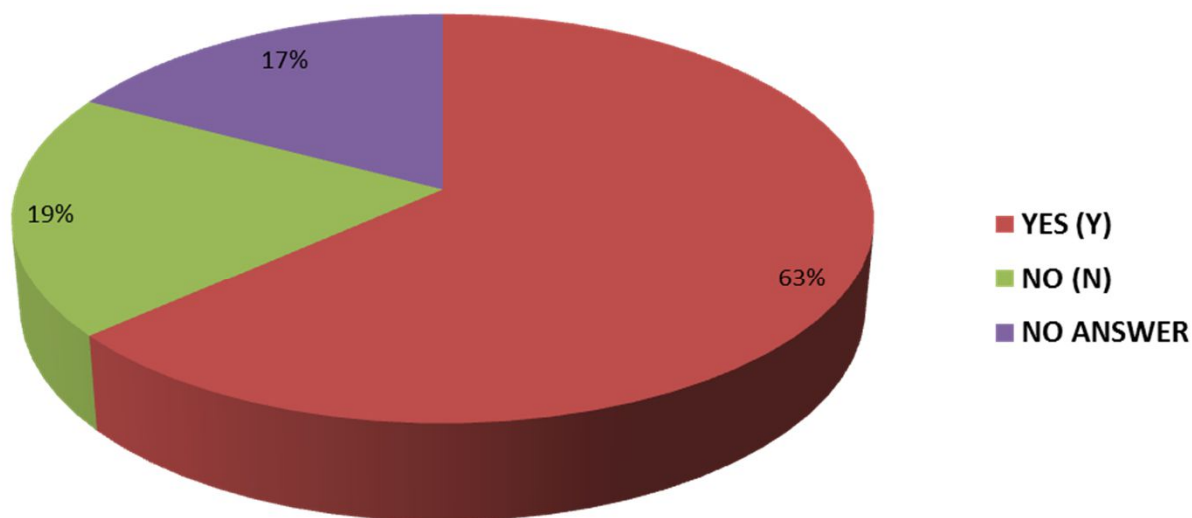
"Professional Practice and Sustainable Development"- Company SURVEY

11.1.3. Which departments are involved in executing SD policies?
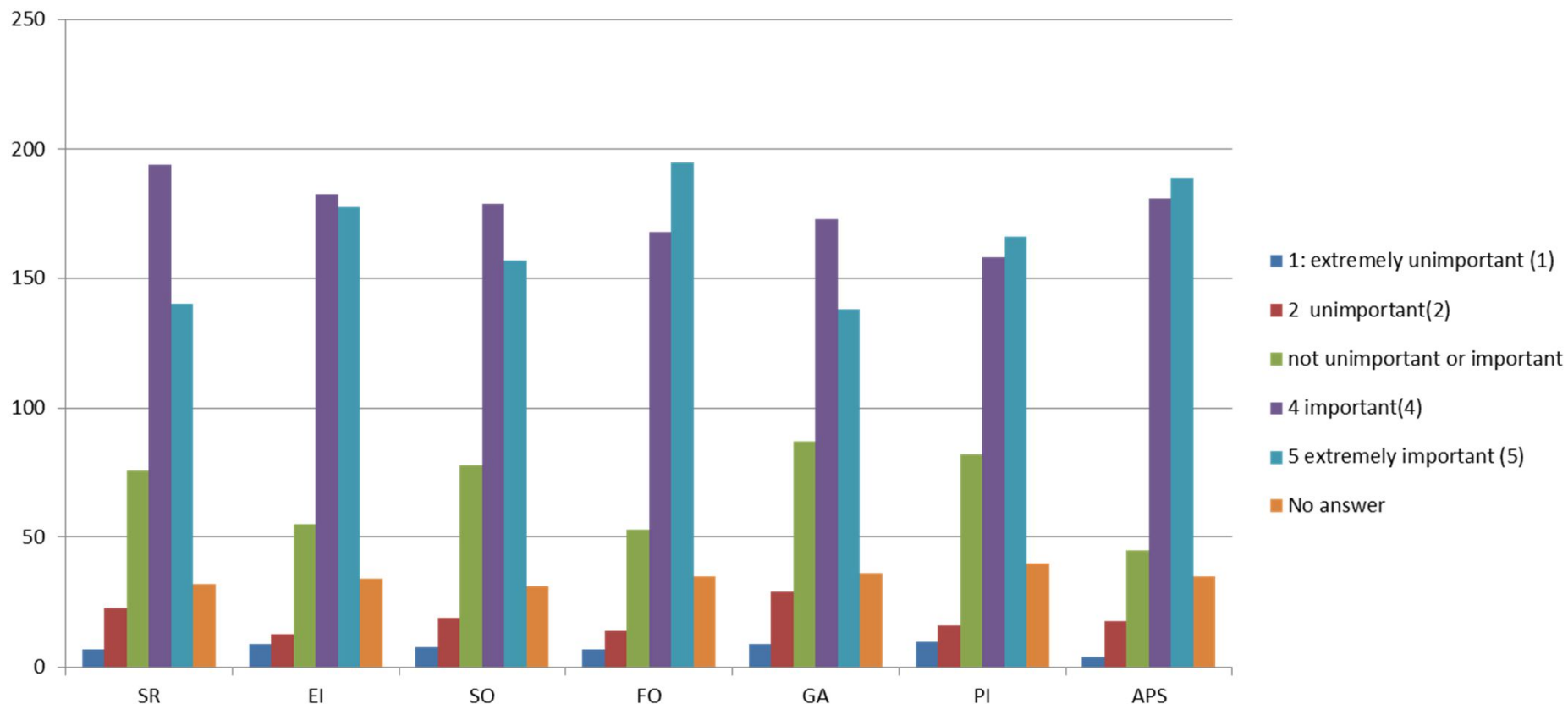
(Choose from list, more than 1 answer is possible
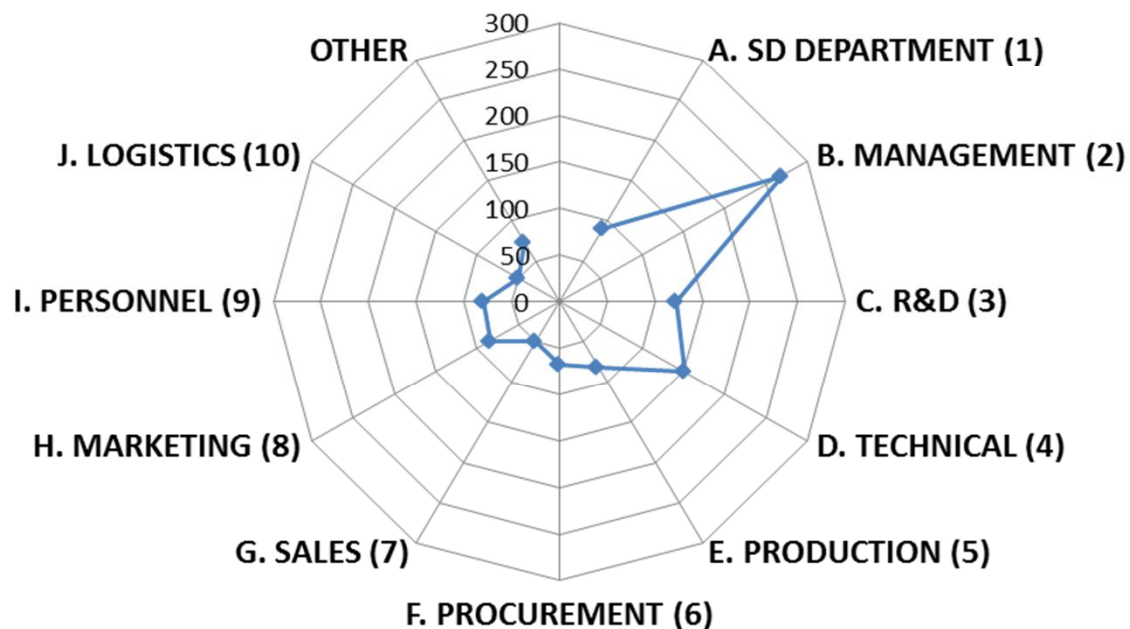
General SD Competences: Social responsibility/ Env.intel. & com; Syst. org/Future or.g/Global aware/pers. Involv./ act.& pract.skills

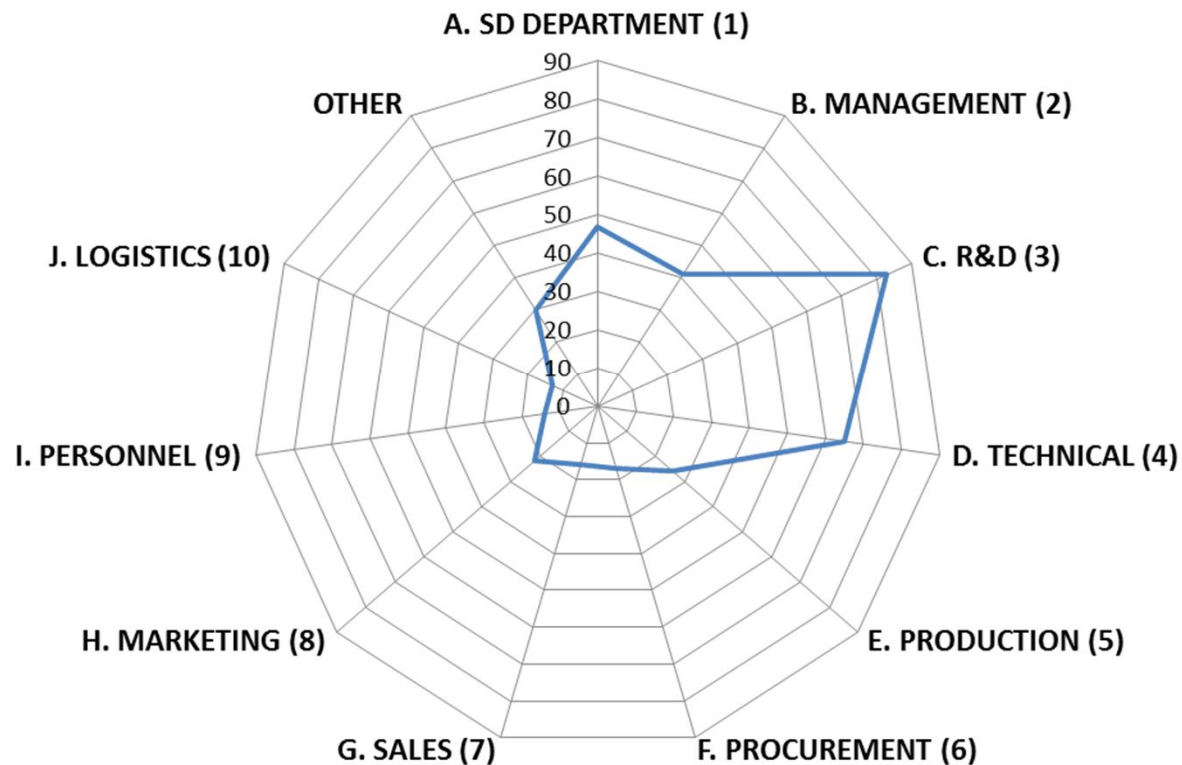# Departments in which new jobs are expected to be created

Results in general - Companies

- For most companies SD is an *issue* in their organisation

- 2/3 of the companies prefer employing people with *practical experience* in SD

- A low rate of companies apply **SD standards** or guidelines (< 45%) – more apply internal standards and ones focused on environmental impacts only

Results in general - Companies

- Standards are a **means to implement** SD in companies

- SD as inherent **competence** in various present actual jobs - less as creation topic for future new jobs

- SD empowers **cooperation between** companies and HEIs

- Strengthening the **knowledge system** enables to adopt sustainable working methods in daily working life

Conclusions

- Many companies take SD into consideration but few actually have an SD Manager:

- "Today, the essential **competences** are the ability to plan for durability and the ability to integrate SD into <u>all aspects </u>of a problem"

- "The skills looked for during hiring are **crossed skills** of project management in order to deal with tough problems"

Hence the importance of *interdisciplinary* Education for Sustainability.

Conclusions

- Important ***issues*** *for companies* include : Energy efficiency and waste reduction;

- Special need for ***knowledge*** in the environment, natural resources and eceological integrity

- Requirement for ***skills*** including efficiency, leadership, sustainability planning, effective communication, analyses of environnemental problems, systems thinking…

- Future orientation and social responsibility are considered most important ***competences***

Recommendations for HEIs –
Tailoring study programmes to labour market needs..

By increasing the importance of all learning outcomes pertinent to SD:

- Ethical, social responsibility;

- Knowledge on sustainable use of natural resources;

- Understanding of the relationship between human activities and the environment

& Empowering HEI / Company cooperation

- Providing quality practical experience in SD

- -Involvement of companies in HEI curriulum development & delivery

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