

Business Plan for the Future of CARE+

28 February 2011

Cefic (supported by Challoch Energy)

Outline

1. The Case for Action
2. CARE+ Background
3. Progress on CARE+ to Date
4. Continuation of CARE+
5. Short-term action plan
6. Long-term action plan

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1. The Case for Action

- Timely to focus on energy issues
 - Rising energy costs
 - Impacts of ETS on all chemical companies
 - High political focus on energy efficiency
- Energy is a controllable cost
 - Extensive action by the large chemical companies
 - Little action by SMEs in the chemical sector
- Energy Efficiency has large potential in Responsible Care and should get a more prominent role

⇒ **Result: “Resource Efficiency” (including water & energy) will be taken up as a RC priority soon!**

Energy management needs and benefits

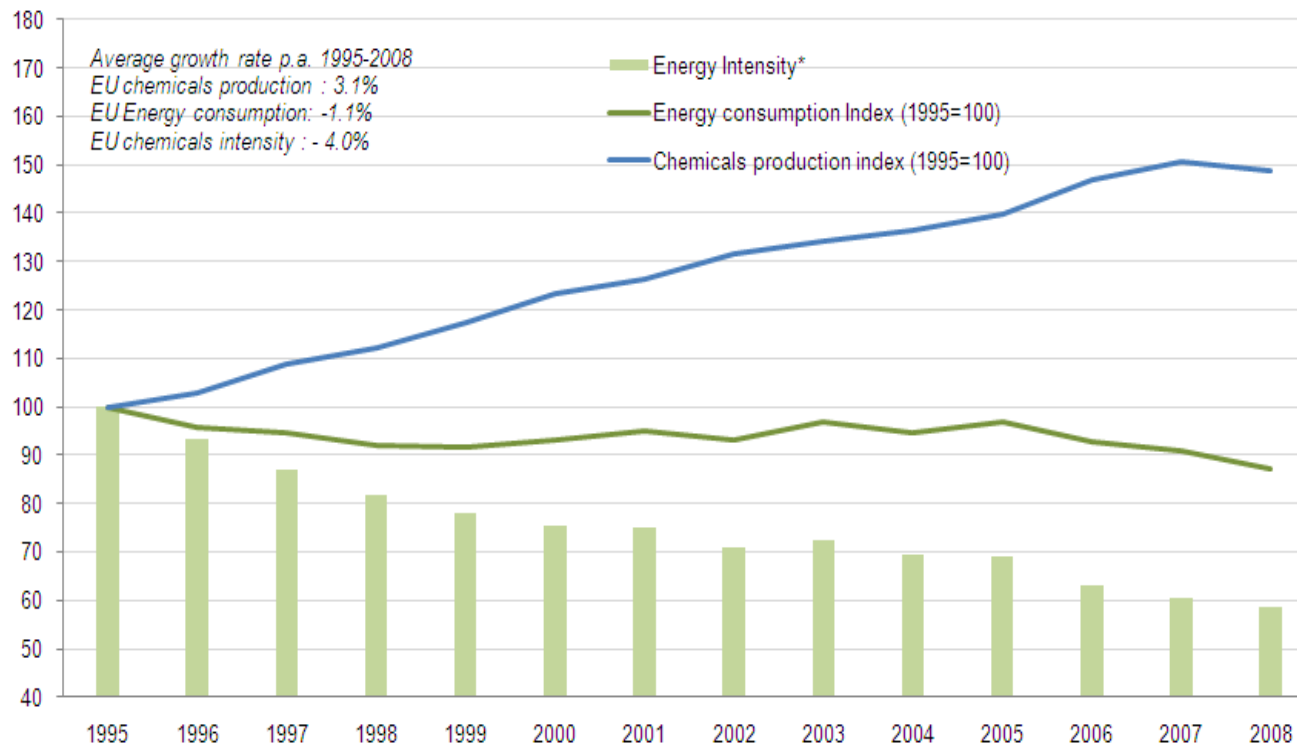


- Chemical industry is an important energy consumer, but with very different situations in terms of energy intensity, and in terms of “energy factor” incidence on enterprise turnover
- Enterprises with high and economically important energy consumption (Energy Intensive Enterprises) are in general “equipped” for a satisfactory energy management
- In most cases (and especially re. SMEs) a systematic assessment of the cost/benefit is very important

The chemical industry has improved energy and GHG efficiency



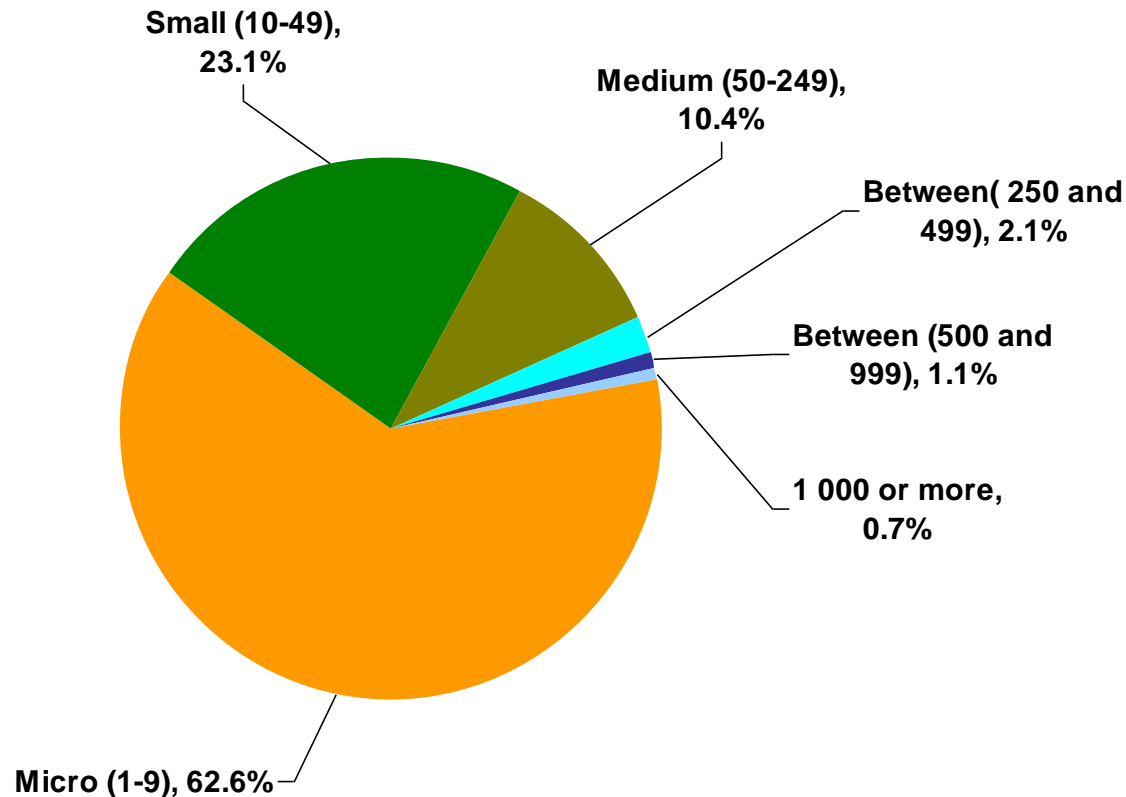
Over the last 17 years the chemical industry has increased its output and at the same time kept energy input constant: consequently its **energy intensity decreased by 4.6% per year on average.**



*Energy intensity is measured by energy input per unit of chemicals production (including pharmaceuticals)

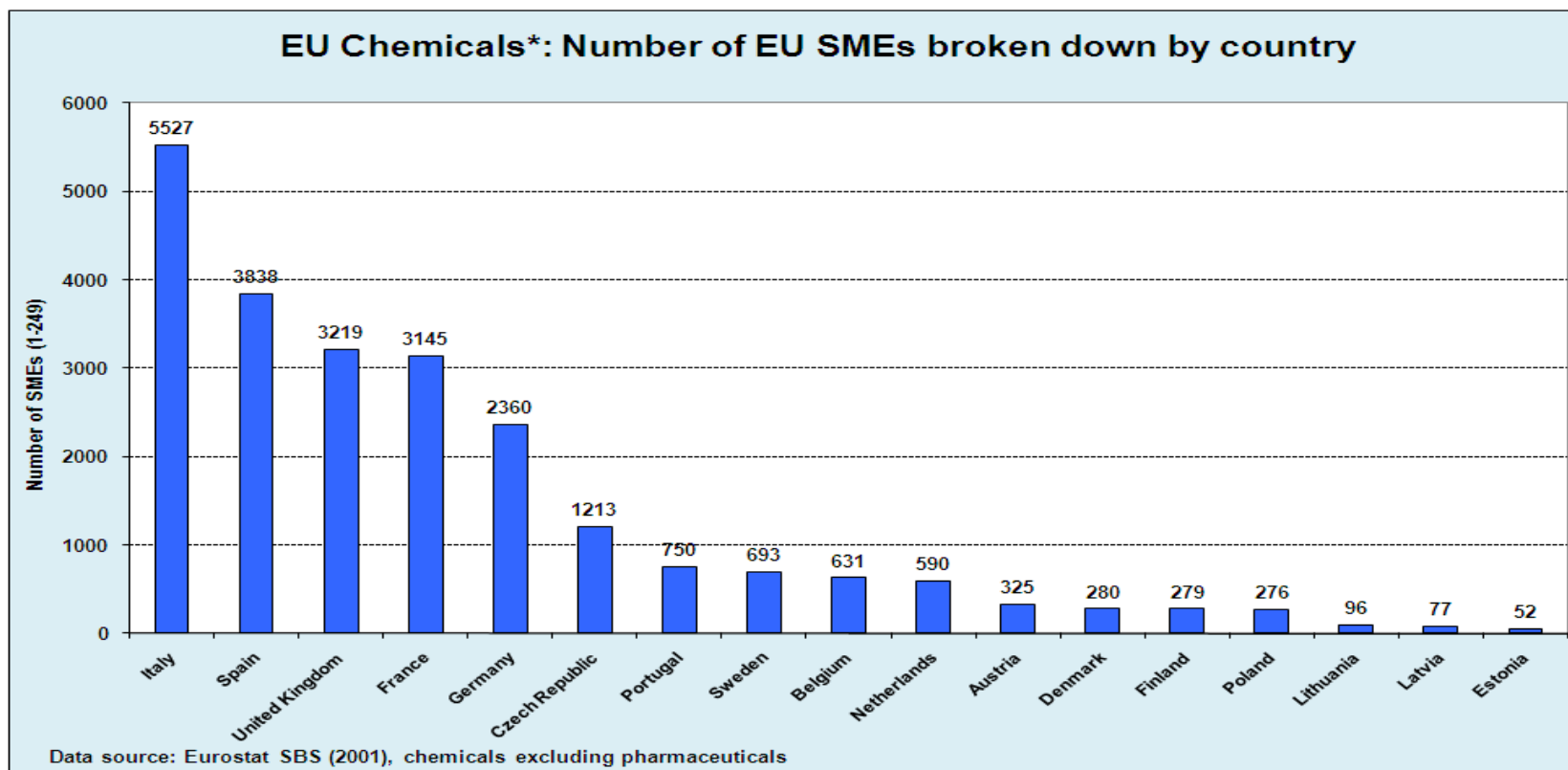
Source: Eurostat and Cefic Chemdata International

The majority of chemical enterprises in Europe have less than 50 employees



96% of all European chemical enterprises are SMEs having less than 250 employees, providing 37% of all jobs and generating 30% of sales

... and are mainly located in West and South Europe



Nearly 70% of 27,000 chemical SMEs are located in five countries: Italy (21%), Spain (15%), UK (12%), France (12%) & Germany (9%)

Energy management: the case of SMEs



- Energy management is a complex activity, requiring a minimum base of technical competence, dedication of resources, and organisation commitment: these characteristics are not always found in SMEs
- A complex energy management organisation and the dedication of important resources are not always justified by the specific situation
- It is advisable that the actual degree of commitment, and the consequent resources dedicated, would be the result of an appropriate assessment of the specific situation: generally, SMEs need support in this activity

There is a significant potential for energy efficiency in SMEs



- 27% of SMEs have instituted measures for conserving energy and resources versus 46% of large companies*
- 4% of SMEs have a comprehensive system for energy efficiency in place versus 19% of large companies*
- SMEs in the chemicals sector account for around 20% of all energy use
- A project in the UK for chemical SMEs has shown an average reduction potential of 15%

*2007 Observatory of EU SMEs

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2. CARE+ Background



Political drivers

- Energy efficiency is high on political priority list
- Cefic implements EU's High Level Group on Competitiveness, Energy & the Environment recommendation to stimulate energy efficiency i.e. in SMEs

Existing success stories

- Energy use per unit of product decreased by more than 40% between 1990 and 2005 in the chemical industry of EU-15
- Voluntary programmes from the UK and the Netherlands have shown that at least 15% energy savings are possible across the sector

SMEs show untapped potential

- 20% of all energy use and little attention to energy issues so far
- Energy efficiency makes perfect business sense for SMEs
- **But, SMEs are hard to influence and so CARE+ is an important initiative**

Concept



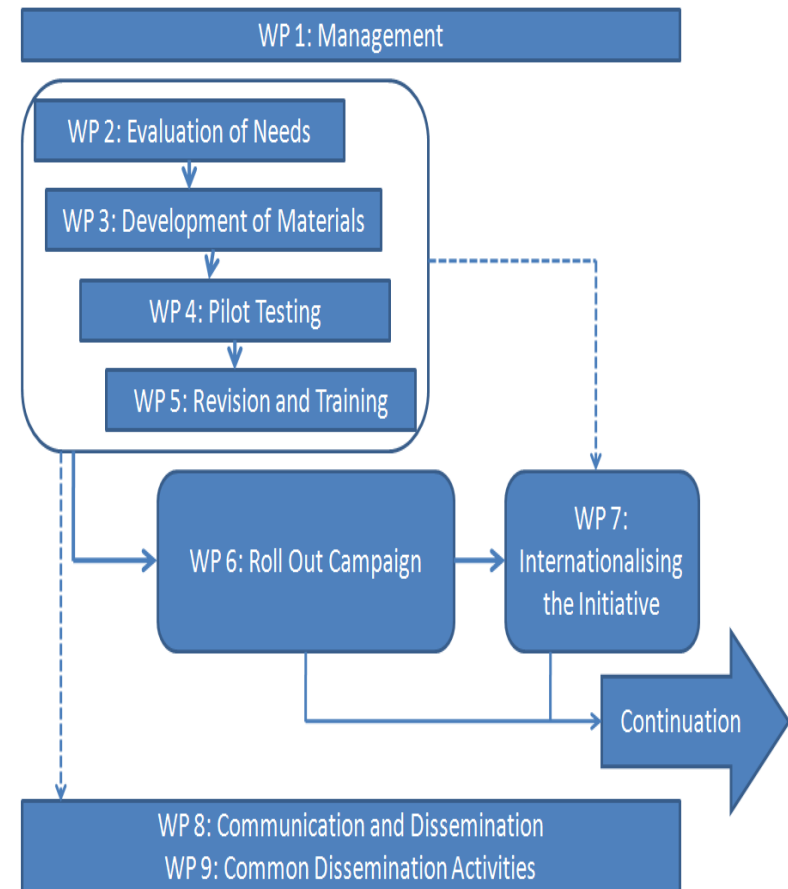
- CARE+ was established to develop and test tools to help SMEs to help themselves to improve their energy efficiency
- These tools comprise:
 - Self Audit Guide
 - Excel Spreadsheet audit tool
 - Manual on Best Practices
- The tools have been offered to SMEs in the three pilot countries (Italy, Bulgaria and Poland) in a Roll Out Campaign
- CARE+ is to be further promoted through Responsible Care, where energy efficiency has always been an important element and will become even more visible in future
- The tools are aimed at SMEs, but should be also available for other industrial sectors and even the large chemical companies

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3. Progress on CARE+ to Date

- ❑ The EACI project was always the first step in a longer term process
- ❑ CARE+ was developed to embed energy efficiency in smaller Chemical companies
- ❑ The tools have been developed, tested, revised and a roll-out campaign and are available on the Cefic website
- ❑ Extensive discussion have been had with the Responsible Care management and a selection of the country coordinators how to further disseminate the project
- ❑ There is broad agreement that CARE+ fits with Responsible Care



The Energy Efficiency Guidance Documents

Self Audit Guide

- Leads through the analysis of company's energy performance
- Helps determine strengths and weak points while managing energy sources
- Aims at improving Energy Efficiency supporting the identification of measures, their expected energy savings, Costs & Return on Investment calculation (suggested evaluation model provided through developed **excel tables**)

Best Practice Cases

- Focus on the energy issues that are of greatest interest to chemical SMEs, e.g.:
 - ✓ Energy management programmes
 - ✓ Steam generation performance,
 - ✓ Motors and drives,
 - ✓ Compressed air systems
- Give guidance on financial implications of the possible energy improvement measures and technologies

**All documents are available on the Cefic website
in English, Italian, Polish and Bulgarian**

The first results so far I

- CARE+ is well developed and proven as a route to Chemical SMEs
- The best results in the pilot phase occurred when SME were individually assisted by energy experts (e.g. through site visits)
- Experience of deploying CARE+ has indicated there is a scope to develop the documentation further to fit local requirements
- Need for energy analysis is a key issue for all SMEs

⇒ Energy saving potential of about 15-20% may be reasonably achieved in the majority of audited SMEs through technical and management actions

The first results so far II

- Technical measures and intervention with highest potential in energy efficiency for chemical SMEs:
 - Introduction of Energy Monitoring System
 - Steam and Condensate System improvement, Heat Recovery and Thermal Insulation
 - Replacement of Electrical Equipment (Compressed Air - VSD, HVAC Systems, Motors and Drives, Transformers, Lightning)
 - Boiler House and Cogeneration

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4. The Continuation of CARE+



Possible routes for continuation

- Stand alone venture offered by Cefic and the national chemical federations
 - This risks the venture not gaining momentum, having to create a new international structure to manage the project
 - ⇒ **This is a sub-optimal route**
- Integrated into Responsible Care
 - Uses pre-existing structures, a well developed route to market and recognisable brand
 - Enhances Responsible Care with a dedicated energy efficiency tool kit, which is timely as the focus in the industry has moved to energy issues
 - ⇒ **This will be the fastest and most reliable route for continuation of CARE+ at the lowest cost**

Responsible Care (RC)



Objectives (source: RC Status Report 2008)

- Continuously improve the environmental, health and safety knowledge and performance of our technologies, processes and products over their life cycles so as to avoid harm to people and the environment
- Use resources efficiently and minimise waste
- Report openly on performance, achievements and shortcomings.
- Listen, engage and work with people to understand and address their concerns and expectations
- Cooperate with governments and organisations in the development and implementation of effective regulations and standards, and to meet or go beyond them
- And provide help and advice to foster the responsible management of chemicals through the whole value chain

⇒ **CARE+ has a natural fit with these objectives**

- **Objectives**

- Initiate/strengthen RC networking with SMEs
- Training of SMEs in free of charge workshops
- Providing management instruments on RC issues
- Sharing of large company expertise with SMEs
- RC contribution to competitiveness
- Reach out to management and workforce

RC toolbox – (prisme2 toolbox)

- Chemicals safety (regulations)
- Chemicals safety (voluntary measures)
- Corporate social responsibility
- **Energy efficiency** ⇒ **CARE+ tools**
- Environmental management
- Integrated management Responsible Care
- Occupational health & safety

⇒ **Soon available again on the new Cefic website**

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5. Short term action plan

- Expand CARE+ to larger Chemical companies, especially those that have decentralised site management – **started**
- Provide CARE+ to companies and associations of other industry sectors, in particular energy-intensive industries – **started**
- Promote CARE+ on a global basis through the RC network, e.g. the ICCA RC Leadership Group & the ICCA E&CC Leadership Group – **started**

⇒ Tools are on hand, for free and flexible

International initiative - deliverables:



• Three national associations:

- Post CARE+ tools in English on website as a free service for members
- Start promotion through internal network
- Start integration in communication and advocacy policy
- Interest indicated by: CIA (United Kingdom), Essenscia (Flanders), VNCI (Netherlands)
- Possible candidates: PCI (Ireland), P&K (Sweden), PIBF (Denmark) ??

• Two national associations:

- Translate CARE+ tools into national language
- Post translated tools on website as a free service for members
- Start promotion through internal network
- Start integration in communication and advocacy policy
- Interest indicated by: FEIQUE (Spain), VCI (Germany)
- Possible candidates: UIC (France), HACI (Greece), SCHP (Czech Republic), MAVESZ (Hungary), FCIO (Austria), ACIS (Slovenia) ??

What has been done so far?

- Fully integrated into RC
 - Cefic RC Manager to adopt CARE+ as part of the package of resources ✓
 - Integrate CARE+ into RC toolbox ✓

⇒ **Priority subject: national associations are encouraged to organise SME workshops with CARE+**

- Energy efficiency actions become part of annual reporting for national associations and member companies – **partly done**
- Roll the material out to all member associations, evaluate translating by the associations into national languages – **partly done**
- Integrated into Cefic communication and advocacy policy – **partly done**

Who's Responsible?

- RC Manager for Cefic manages whole process –
contact / focal point
- Energy and Environment team in Cefic provide input
– **background knowledge**
- External assistance may be required for updates –
technical expertise
- CARE+ Steering committee and consortium (IT, PL & BG) assist with the management and integration of CARE+ in RC – **strategic advice**

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- **National chemical associations could use the CARE+ guidance documents as described below:**
 - Fully integrate “energy efficiency improvements” and “capacity building for SMEs” in external advocacy and communication actions and internal promotion through local network
 - Evaluation and adaptation of tools to local legal environment & individual needs of SMEs in the respective country

⇒ Full integration into existing structures to avoid conflicts with existing national measures

“CARE+ II” concept

- EACI (develop an e-Learning portal for CARE+) as a follow-up project «CARE+ II»
 - Show online how to use the CARE+ guidance documents
 - Develop certificates for successfully finalised trainings
 - Provide technical expertise (e.g. site visits) if certain number of measures are planned to be taken up or the energy efficiency performance is very low like for instance in many SMEs in Middle and Eastern Europe
 - Show video clips with interviewed SME managers stressing their positive feedback, in particular on the long run

⇒ **Next concrete steps need to be developed from here!**

Further possible long term steps

- Updating and improving material
 - After Roll Out Campaign in EACI project a number of improvements to the tools have been identified
 - These need to be implemented, small project to do this with voluntary contributions to fund external assistance
- Develop Case Studies
 - SMEs that have used CARE+ should be encouraged to publicise their experiences and report on the benefits they gained through the project
- Develop Marketing Material / Reporting Protocols
 - Develop marketing material for concrete tools which can be further rolled out to Cefic national associations, all large companies and other energy-intensive sectors
 - Develop national reporting protocols on energy consumption