

# **ECRN Joint Position**

# Position Paper for the European Technology Platform for "SUSTAINABLE CHEMISTRY": The vision for 2020 and beyond (Version 1 (FA))

28.01.05, Brussels

www.ecrn.net







# I. Introduction

The European Chemical Regions Network was invited by the European Chemical Industry Council (CEFIC) to take part in the debate about setting up a European Technology Platform for Sustainable Chemistry within the 7. Framework Programme for Research and Development.

The main aims of the initiative are

- to engage all major stakeholders in the development of a shared vision of a more sustainable future for EU chemical industry,
- to give a joint input in the European Strategic Research Agenda for innovation in key chemical technologies and
- to develop an implementation Action Plan for the Strategic Research Agenda for mobilizing resources for collaborative R&D.

A key element of this strategy is the production of a "Joint vision for sustainable chemistry towards 2020 and beyond" which will be presented prior to the EU spring council.

The ECRN-Presidium on December 1<sup>st</sup> has welcomed the offer of CEFIC to join this initiative and has decided to provide a response to the draft vision document.



# II. General comments of the ECRN to the draft vision document

The draft report is highlighting at many places the need to engage all stakeholders in support schemes to promote research and innovation in the field of chemistry.

In this context is it highlighted that the right legal and financial framework conditions must be in place to provide the necessary conditions for a successful research policy.

However it has to be criticized that in the current report this necessary interaction between the partners – also at regional level – is not described sufficiently and/or is only explained very implicitly.

The experiences made in the clusters in chemical regions have shown however that the promotion of research has to be included in a pro-active regional environment.

In concrete terms this means that for example there is a close linkage between technological research and skills development of the workforce to make research policy a success.

This means that research initiatives need to be embedded with regional knowledge strategies and in particular with skills initiatives.

The same counts for the involvement of SMEs or the provision of regional funding, the development of research infrastructures and the provision of risk capital.

It is also necessary to outline the need to optimize the role of research centers in relation to skills development and the provision of facilities in order to achieve sustainability for excellence, notably using existing agreements also at regional level such as the co-operation of the Lombardy region with the Joint Research Center in ISPRA and other in view of fostering the Lisbon agenda.



Furthermore the report should highlight in a stronger way the involvement of the citizens at local and regional level in research policies to rebuild confidence and awareness on the new chemistry and to ensure acceptance for the new research agenda. The report should therefore put more emphasis on the partnership principle and the need for regional co-operation.

The report makes concrete proposals for the future design of the Technology platform. Besides some technology related working structures it is also planned to set up a commission on horizontal questions and to build a Steering Group.

The ECRN is proposing to be represented in this Commission as well as in the Steering Group to ensure the link between European research initiatives with policies at regional level and to give a long term input regarding the regional dimension of the Technology platform.



# III. Direct Remarks to the text

# <u> Page 4:</u>

Text box:

(New bullet point)

• <u>"to create an adequate and renewable skills base"</u>

last bullet to read:

• 'The industry will have "secure" access to

# Comments:

Third paragraph should refer to skills as one of the key drivers for future competitiveness.

# <u> Page 7:</u>

#### 7<sup>th</sup> paragraph

The following addition is proposed: ".... Successful R&D of the European Chemical Industry .... for the future. <u>Innovation defined as a coherent and inclusive</u> <u>strategy which includes all stakeholders mainly at local and regional level will</u> be important for the survival ....

#### Comments:

Even though the current report highlights on page 7 that all aspects of innovation should be taken into account and that therefore all stakeholders should co-operate closely, the report avoids to make any concrete statement about the exact nature of this co-operation and the interaction of the partners. At this place there should be a mentioning of the positive impact of regional innovation strategies or the link between research and regional policy programmes.



# <u>Page 10</u>

# Second paragraph

Reword the last sentence: "Efforts based on new products through innovation and cost reduction by economy of scale, technology excellence <u>as well as competitive</u> <u>feedstock supplies</u> seem to be futile."

# Comments:

The 'phase of maturity'. Yes, that is where Europe is, but it does not mean we do not need chemicals anymore, merely that the rate of growth is going to be more in line with GDP growth than with the growth rate of somewhere like the Chinese economy. The ECRN therefore disagrees that all the new product development etc. is futile. This is far too simplistic and defeatist. Competitive feedstock supplies are probably more closely linked to our problems than the lack of innovation.

# Third paragraph:

Reword the first sentence: "The leading position of the EU in chemicals manufacturing is slowly eroding <u>because of the dynamic development in Asia and</u> <u>the global investment pattern that go with it</u>; the EU's share ...

# Fourth paragraph.

Inclusion of new sentence after the first sentence: ...advantaged feed stocks. <u>This</u> however depends also on the development of feedstock prices over the long <u>run</u>.

# Comments:

As feedstock prices go up, so does the value of upstream plants. New predictions actually foresee more investment in petrochemicals/bulk chemicals as a result.



# <u>Page 11</u>

# Second paragraph:

Inclusion of a new sentence after the first sentence: "This scenario relies heavily on skills/knowledge/expertise."

Inclusion of a fourth indent:

# <u>"The feedstock access scenario based on prediction of the International Energy Agency."</u>

# Comments:

The three scenarios do not include any viable way forward to chemicals production in Europe. From where will European demands then be met? The second indent 'functionality not tons' relies heavily on knowledge, yet does not include the need for skills/knowledge/expertise in the consideration.

There should be a feedstock access – type scenario. The International Energy Agency certainly has a very different energy prediction for Europe by 2030. Secure feedstock supplies are likely to be far more important in the future than at present. What can Europe do to ensure such an advantage?



# <u>Page 12</u>

Section 1.2.

Second paragraph. Inclusion of the following: "... for European manufacturing <u>and</u> <u>for the provision of skills and knowledge</u>.

# Comments:

As the downstream users step up R&D, they will create a market for knowledge. Again, there is no reference to the provision of knowledge.

# <u>Page 13</u>

# Paragraph 1.3:

Inclusion of a new sentence: <u>"The demand side on Human resources needs to</u> <u>improve. The industry needs to spell out its needs and requirements for an</u> <u>expanding role in society of the future.</u>"

# <u>Page 17</u>

end of Section 2.3. and variable product streams, "produced by a skilled, motivated and flexible workforce."

# Comments:

R&D investments will include a role for the skills agenda again the industry needs to build up the demand side to prove that chemistry is a realistic career option for the future.



# <u>Page 20</u>

# 3.2. Scope and Objectives

2<sup>nd</sup> paragraph: Add the following text:

• "mobilising of financial support for R&D from public EU, <u>national and</u> <u>regional funds</u>

# Comments:

The report only refers to the European and national level regarding mobilizing additional resources for research policies. The report should also take into account the role of the regions and their instruments in research and innovation policy.

# <u>Page 23</u>

# I Industrial Biotech

# Final sentence of first paragraph:

The following addition is proposed: "... and bio-diesel "as well as providing new opportunities in new combinations of these substances."

# Comments:

Final sentence should recognize that these products do not exist in isolation. For example, the production of bio-diesel also produces glycerol, thus providing a substance in large quantities, which offers new – yet to be thought of – opportunities. Similarly, fermentation alcohol offers opportunities for advantageous substitutions such as ethyl tertiary-butyl ether (ETBE) etc.



# **III Reactions and process design**

Change the last sentence of the first chapter as follows: .... that developments in reaction engineering, **process design and non-traditional feedstocks** will tremendously change the appearance ...

# Comments:

A reference to innovation in design for non-traditional feedstocks, or entirely new routes to substances such as acrylics from propane for example which are being looked at in Europe should be made.



# For more Information

Andreas Fiedler ECRN Secretariat isw GmbH Phone +49 345 29982724 Fax: +49 345 29982711 Mobile: +49 172 3417385 Email: fiedler@isw-gmbh.de Catrin Gutowsky Ministry for Economy and Labour of Saxony-Anhalt Phone +49 391 567 44 52 Fax +49 391 567 44 50

Email : catrin.gutowsky@mw.lsa-net.de

#### Notes for Editors:

ECRN: The "European Chemical Regions Network" has the objective to exchange experiences about the joint challenges for chemical regions and initiate a mutual learning for the strengthening of the chemical sector. Joint positions on relevant policy issues are developed to raise the regional voice in the European decision making process. The partner regions are Saxony-Anhalt as the coordinator, North Rhine Westphalia and Lower Saxony (GER), Huelva, Asturias and Catalunya (SPA), Lombardia and Piemonte (ITA), North East and North West of England (UK), Limburg (NL), Masovia (PL) and Ida-Viru (EST). Contacts to further chemical regions have been established to enlarge the network and become a stakeholder at European level. The total project budget is 1.639.000 €, 61% of which is funded by the European Union. More details about the ECRN can be found on its website at www.ecrn.net.

**INTERREG IIIC** is an EU-funded programme that helps Europe's regions form partnerships to work together on common projects. These projects enable regions to share knowledge and experience that will help them develop new solutions to economic, environmental and social challenges. 98 percent of all European Union regions are involved in INTERREG IIIC projects. There are more than 250 INTERREG IIIC projects running involving 2500 local and regional actors from 50 countries; 20 percent of these are from new EU Members. More information on INTERREG IIIC can be found on <u>www.interreg3c.net</u>.