Chemical Sciences Scotland Conference 2009
Sustainability Breakout Sessions Feedback

1. **How do you feel about the issues raised?**

- Raw material security incl. energy security
- People are key
- Timing is right
- What are rate limiting assets?
- Sustainable development is more than just economic sustainability.
- Embracing "green" is difficult (e.g. planning on windmills)
- Linkage on people. Training, SMAS/PICME
- Integrate innovation on all business areas – products, processes, systems.
- More dynamic change; factor "innovation" agenda
- Difficult to think 20 years ahead. (Motivate: not a short term view. Journey in small steps)
- How to be best – benchmarking
- Sustainable: invest in image, socio-economic benefits, green credentials and delivery and economic sustainability = need both
- Different dynamics of industry and academia: timescales are different, where do we set "rapid response" tech. support (e.g. German funds "floating" resource.
- Perception of the industry – start at the school level.
- Legacy, reputation, brand, critical mass (scale, competition), education talent natural resources – assets
- Benchmarking & people are important
- Short term vs long term
- Communication – case studies, single subject, linked, workshops.

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2. What ideas or steers would you provide to CSS?

- Collaboration: companies, education, academia & SMEs. Not just at top level.
- Weak links between SMEs & academia
- Relative importance of various aspects of sustainable development
- Info. flow into CSS needs to improve
- Engage youth, improve public perception
- Are you missing the global angle?
- Change legislation/classification of “waste” to allow re-use as feedstock. Waste register?
- Government to buy “green” products
- Public awareness/education, fight the pseudo science misinformation: via teachers? Powerful message “role of chemist @ Tesco”
- Frame the vision in “20 years”: change balance to favour survival, share/benchmarking, direct SMAS to spend money on what the business wants.
- Establish/pull out common factors for CSS businesses - assets, investment
- Small teams from large PLCs to SMEs to gain skills/share experience. Bring output to CSS
- SMEs would be able to spend £50k: how to get them into discussion, “bid for £50k”
- Invest in youth = apprentices + “next step” EotF, shared apprentice scheme? What skills? Chemical Technologist?
- Support for long term- no quick fixes
- Streamlining – grants,planning
- Optimise asset performance, continuous improvement - people (ambassadors, studentships, training, apprentices), systems,hardware
- Accelerate networking- collaboration
- Communication is critically important – workshops, case studies, networking, company ambassadors, share and enjoy, good practice
- Sectoral symbiosis – cooperation, commonality, cluster, cohesion, cost savings.

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3. What would you like CSS to do as a result of this?

- Engage youth, improve perception, good safety, raise profile
- Green energy high profile projects
- Transportation – sea policy?
- Practical measures in mapping wider trends
- Resource competition? – people, infrastructure
- Collaboration – universities & industry. Does it need funding? Balance of skills; speed of response
- Public perception of the industry- schools, chemistry in everyday life
- Benchmarking & sharing/networks - economic KPIs + green/social KPIs
- Innovation in non-technical areas e.g. continuous improvement, management processes, organisation & change
- Access to research facilities
- Focus- choose activity, high probability of success, rapid initial progress
- Educate
- Culture of continuous improvement, competitiveness, best practice
- Target new industries, process
- Benchmark, identify source of best practice, focus of interest, evaluate options, quantify impact