

NEPIC - The North East of England Process Industry Cluster

Set up by industry to develop the long term future and improve competitiveness of the process sectors in North East England.

NEPIC is a 'cluster' organisation that represents 720 participants drawn from across the process sector and includes representation from Pharmaceutical, Petrochemical, Fine & Speciality Chemicals, Bioresources/Biotechnology, Polymer & Rubber, Commodity Chemical and Supply Chain companies based in North East England.

- Over 35,000 people employed
- A further 200,000 are indirectly employed
- Generates over £26 billion (over 30%) of the regions GDP
- It is the regions largest industrial sector

NEPIC Current Cluster Strategy Summary

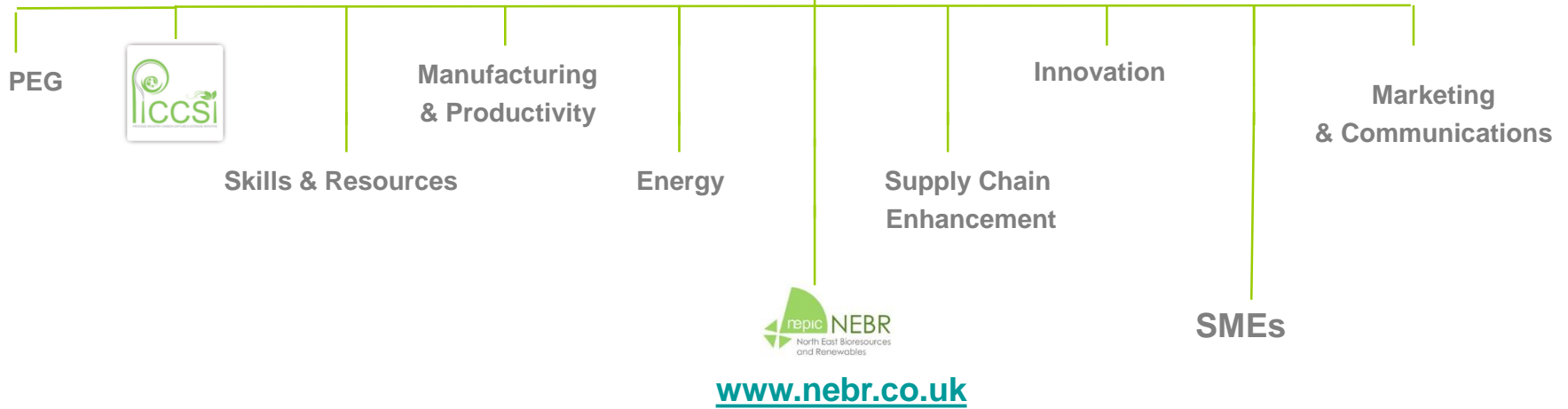
Vision - a world class, high value process industry cluster based on innovative, sustainable high tech manufacturing.

Strategic Themes:

- Collaboration, growth and investment.
- Develop and grow business opportunities for SMEs.
- Improve connectivity in the supply chain.
- Increase international awareness/promotion of the cluster and process industry.
- Develop and support innovative projects – low carbon.
- Support and develop NSAPI activities (grow apprenticeships).
- Grow cluster membership.
- Continue to provide a Voice for the Process Industry.

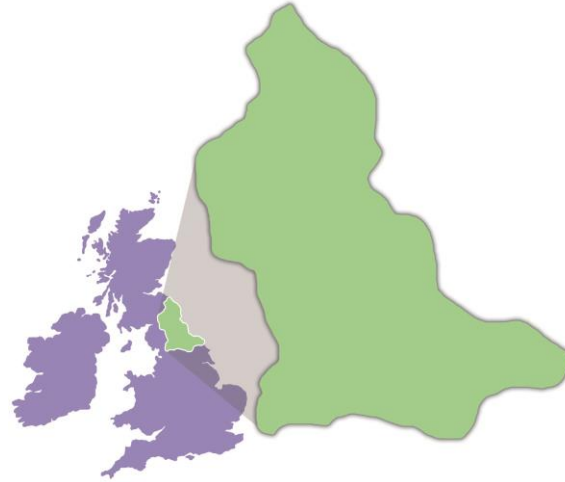


NEPIC Leadership Team



NEPIC's strategic programmes involve senior personnel from industry and the research base, focusing on several strategic themes of crucial importance to the process sector.

Geographical Position



Business Acceleration for SMEs (BASME)

- **Growth:** A NEPIC programme to help ambitious SMEs grow their business in the Process Sector.
- **Engagement:** A way to help SMEs engage with the sector more easily by acting as a gateway to larger manufacturers.
- **Strength:** A way to strengthen the Process Sector Supply Chain in the region.

Who is Currently Eligible?

- SMEs in the region i.e. **North East of England, Hambleton and West Cumbria.**
- Must meet EU **definition of an SME** i.e. less than 250 employees, less than £40m turnover and not part of a larger organisation.
- Must have a capability to **supply goods or services** into the Process Sector Supply Chain.



Key Elements of the Programme

- **Backed by Industry:** Supported by UK Government funding of **£1.5m** plus in-kind support by Process Industry which currently stands at over **£2.4m**.
- **3.5 year programme:** to **end 2015**, but will be maintained thereafter as part of programme legacy.
- **Focused Team:** committed to;
 - increasing **sales** of SMEs within region
 - increasing **exports** of SMEs
 - developing product & process innovations** by SMEs.



Key Elements (contd)

Benefits for SMEs:

- Free and flexible **support from industry experts** in the programme team.
- Access to powerful NEPIC network of over **800 companies & support organisations.**
- Access to other networks linked to NEPIC: one-stop-shop
- Free mentoring for SMEs by over **190 senior figures from the industry.**



Mentoring – the essence of BASME

Mentoring support comes from many sources:

- The BASME and NEPIC team all of whom have vast experience in the sector.
- Well over **190 senior industrialists** from within the process sector who can share their expertise and knowledge to support SMEs.
- **Third party specialists-** related to the Process Sector.
- **Brought in expertise-** If we can't find a way to help you from all these sources we will find someone who can.

Mentoring

Various mechanisms used:


- One to one mentoring from mentors within NEPIC member companies. Although a very healthy number in use, we are always looking for more in all functions especially Operations, R&D, Engineering, Sales and Marketing, HR and training.
- Specialist mentoring from mentor outside cluster identified by project team. Now using several consultants in specialist areas.
- Mentoring to several SMEs by NEPIC mentors at BASME workshops and NEPIC networking events.
- Mentoring from UKTI for exporters and Mentoring to BASME companies on NEPIC visits outside UK - most recent visit to India in Feb/Mar 2015 included 6 SMEs and all of them made great contacts.
- Mentoring from one BASME company to another – lots of this going on but not always recorded. Starting to collect via BASNET.

Targeted Functional Mentoring

- We now have 414 SMEs on programme - these can be categorised into several subject areas e.g. construction, engineering design, specialist engineering services, specialist HR services, analytical services etc. Hence we have increased the amount of mentoring in these specialist areas.
- We have run several targeted sessions where a small number of SMEs in the engineering field have explained their services to a small number of senior engineering (or operations) managers from larger companies within Teesside Integrated Group.
- We have also carried out specialist mentoring for providers to the pharma sector and also in HR services.
- We plan to carry out further meetings in a similar format for Training and Development, IT, HR services, analytical support, warehousing and logistics etc. The first target will be training and development and we have started to look at a meeting in mid year. We also need to organise first meeting with larger engineering companies.



Programme Workshops



Workshops are an excellent way to help SMEs grow their business and they are **free**; focused on **specific topics** to assist SMEs; **tailored towards the needs** of the Process Sector. Examples to date have included:

- **Understanding how to work with the sector.**
- **Understanding SHE culture in the sector.**
- **Guidance on procurement processes in the sector.**
- **Increasing exports.**
- **Guidance on Innovation processes and sources of help.**
- **Improving productivity and time management.**
- **Market segmentation.**
- **Improving communications and networking.**
- **Improving sales pitch to companies in the process sector.**
- **Developing sustainability.**

Over 45 workshops have been held since the programme commenced in 2012.

Developing An SME Community

- **Connectivity:** There have been many situations where SMEs on the programme have been able to help each other and where larger companies have found out about services and goods which are available locally.
- **Network:** A key part of the programme is to enable NEPIC members to see what BASME companies can offer with a view to finding services which match their requirements.
- **Knowledge:** BASME companies can see what services other BASME companies can provide.



Leads to business opportunities

Additionally, an intranet in place (BASNET) to help sharing of ideas.

And Does The Programme Deliver ?

- 400 SMEs targeted to participate in programme - **414 now actively engaged.**
- 200 SMEs to receive mentoring – **300** have already had mentoring support .We have access to over **190 mentors** within the NEPIC family.
- To create 1000 new jobs – **currently at 700.**
- To generate SME Business growth - **£40M of new business generated for SMEs in the region.**

DEELOCSI

Delivering Energy Efficient - Low Carbon - Sustainable Industry

A **Grow Greener** 3 Year Project for Northeast SMEs
Part Funded by ERDF – Practical Completion – June 2015.

- To assist 120 SMEs improve their Business Performance and Green Credentials.
- Assess SME Resource Efficiency and Carbon Footprint and Identify Improvement Strategy.
- Accreditation for 30 SMEs.



DEELOCSI

WHY DO SMEs NEED ENERGY MANAGEMENT?

Why do they Ignore It?

- I'm too busy to worry about energy costs.
- I can't save it, I need it to run my business.
- It's more hassle than it's worth to save a few €s.
- I try to switch things off but get lots of complaints.
- Compared to other costs it's a drop in the ocean.
- I'm efficientI always shop around for cheaper energy prices !



DEELOCSI

WHY DO SMEs NEED ENERGY MANAGEMENT?

Putting aside the excuses:

1. More Efficient – Less Overheads – More Profit
2. Improved Performance - Greater Business Opportunities
3. Become/Remain Competitive – Greater Sustainability
4. Importantly – Supply Chain will/are demanding it
5. Moral Obligation – Good Stewardship



‘by adopting a structured approach to resources & energy efficiency, a minimum reduction in consumption & carbon emissions of 10% can be realistically achieved....Source: Carbon Trust’



DEELOCSI

The Delivery:

Out of 120 SMEs Engaged, we have:

- 108 Assisted with Improved Performance.
- 82 Assisted With Environmental Management.
- 30 Assisted with Energy Efficiency Accreditation.

DEELOCSI

Improved Performance – What Does This Mean?

- Able to Sign Post SMEs to others.
- Provide Guidance on Staff Training and Awareness.
- Utility Cost Comparison.
- Increased Supply Chain Recognition.
- Reduced Overheads.
- More Competitive.

DEELOCSI

Environmental Management – What Does This Mean?

- Guidance towards energy management principles.
- How to monitor energy use.
- Provide an understanding of main energy users.
- Look at waste streams and recycle opportunities.
- Produce a report (IDR) – an Action Plan.
- Identifying Quick Wins, Medium & Long Term Options.
- Including Renewable Energy.



DEELOCSI

Accreditation - Supply Chain Recognition - 30 SMEs.

Why Accreditation?

- Customers will/are demanding SME energy performance
- Take action NOW ahead of competitors
- Already appearing as PQQ in Tender Documents
- Demonstrate Strong Environmental Sustainable Profile

DEELOCSI

How was it Achieved :-

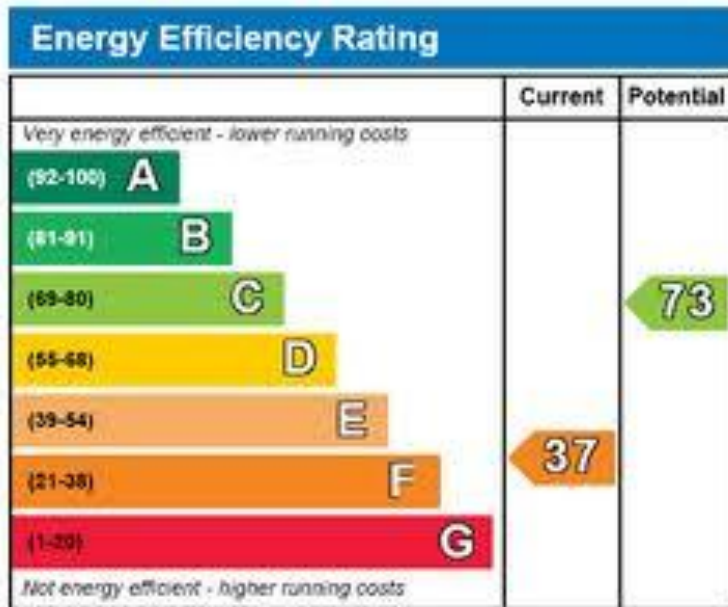
- Independent Accreditation Provider appointed by NEPIC through DEELOCSI.
- Baseline assessment of Energy Performance – SEC/BEC/AEC.
- SME arranged improvements as recommended in the IDR.
- Following completion of improvements, greater Energy Efficiency verified.
- SME awarded with Certificate showing Demonstrable Improvements.

DEELOCSI

Accreditation Typical Certificate



Site Name: NO:
Site Ref: A-00



RECOMMENDATIONS		
No Cost - Low Cost/Easy To Do		
The BMS controls the space heating well. During the spring and autumn the control temperatures are should continue to be monitored and set back to reduce energy consumption.		Operation
The BMS controls occupancy times, but is dependant on the business supplying the times; communications should be formalised as this could be improved.		Operation
Existing motors should be replaced with high efficiency motors on a replacement basis.		Design
Medium Cost		
The lights could be changed to low energy lamps with improved lighting level control.		Design
Lighting is controlled by the BMS and has light level sensors but as the lights are 'High Bay SON' fittings they take time to re-light so the control system is currently not used: consider initiating and solving issues.		Design/Operation
The site has an Enerair control system, which monitors supply and usage, from the two compressor houses which feed the site. The air pressure needs to be high at the point of generation to cater for the pressure losses in the system. Shop compressors may improve this.		Design
The existing pipework lagging could be replaced with better quality insulation.		Design
Local steam generating plant could be considered for summer usage.		
Install power factor correction equipment.		
Introduce automatic controls, to remove the human element		Design/Operation
Improve controls of door operation to make better use of the draft trap principles.		Design
Consider installing double glazing.		Design

Date Inspected

Expiry Date

Surveyor

Approved by



DEELOCSI



Main Observations from Audits:

- SME Approach to Energy Management.
- Simple Measures – Water Heaters/Battery Chargers/Vending M/Cs.
- Lighting Upgrade with Automatic Controls.
- Compressor Operations - Set Point/Leaks.
- Variable Speed Drives – Hydraulic/Air & Water Flow/Compressors.
- Boiler/Heating Time and Temperature Controls.
- Voltage Optimisation – Reduce by 2.5% = 4% Energy saving.
- Destratification Fans.
- Heat Recovery from Process Equipment.
- Renewable Energy – Biomass/PV/Small Wind Turbine.
- Project headlines include CO₂ savings identified thus far equate to 8,650 tonnes and cumulative cost savings £2.89 million per annum.

DEELOCSI

Basic Energy Management:

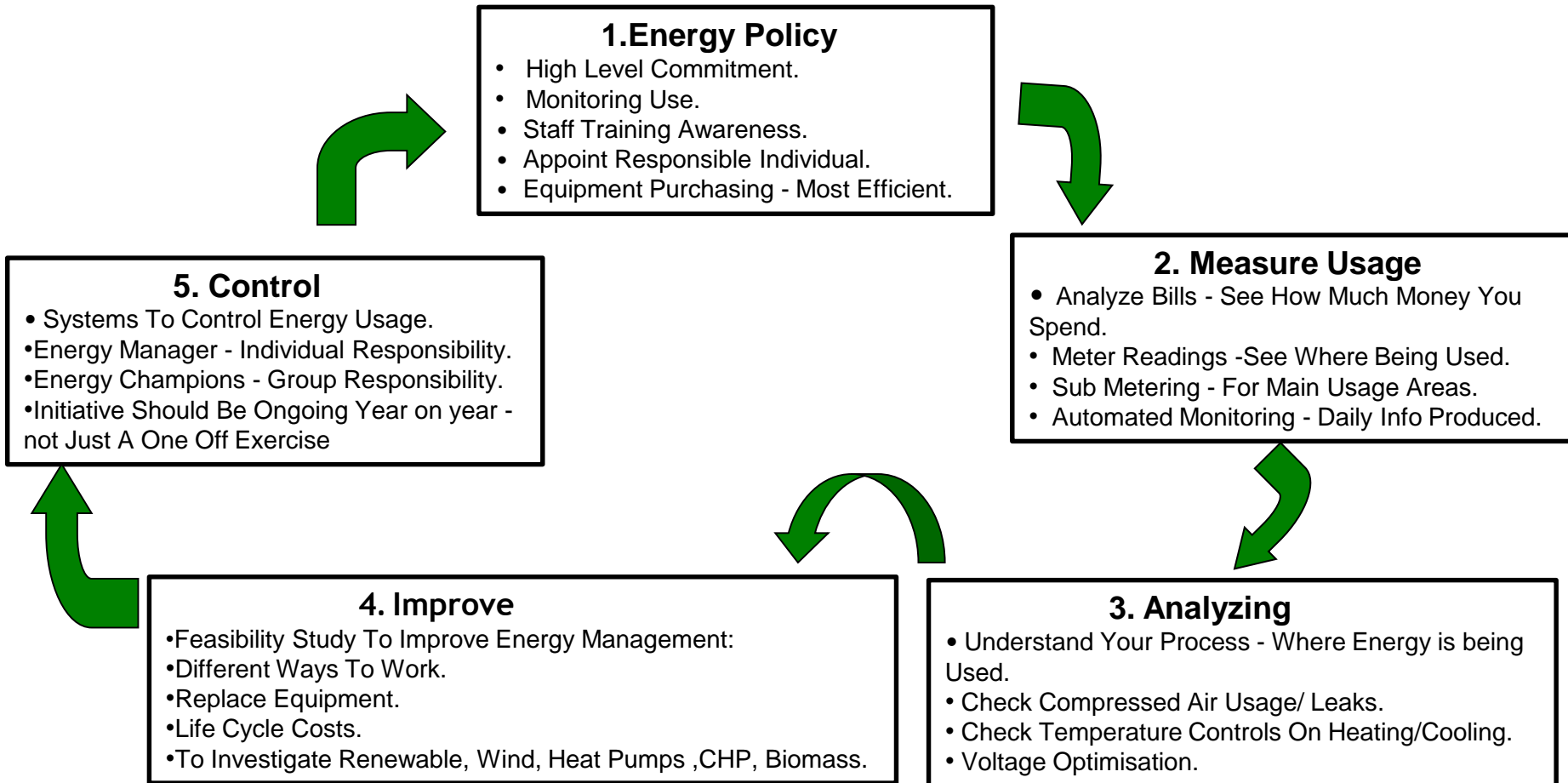
- Company's approach to Energy Management.
- Design and Operation of Existing Equipment.
- Renewable Energy Options.

Sustainable Approach:

- Not a 'ONE STOP' strategy – on-going.
- Needs to be built into company ethos.
- Reviewed annually – at least.

DEELOCSI

FIVE Steps to Energy Management



DEELOCSI

