

ANNUAL MEMBERS REPORT 2016

nepic

for North East Process Industry Cluster (NEPIC) Limited



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CHAIRMAN'S STATEMENT

"IT REMAINS TO BE SEEN WHAT FORM THE EVENTUAL BREXIT WILL TAKE BUT I AM OPTIMISTIC FOR INDUSTRY." It's my great pleasure to introduce the NEPIC Annual Report for 2016. The year has been very successful for NEPIC and truly momentous on the political front.

NEPIC has proved as flexible as ever in delivering outstanding benefits to members, selling the region to others and lobbying on behalf of the industry.

Special mention should be made of the Tees Valley Process Industries study that has highlighted a huge number of synergistic opportunities both for existing companies and for potential new businesses.

I was truly amazed at the exciting opportunities showcased at the NEPIC Bioresources conference in November and am hopeful that some of the innovation being shown will lead to major regional investments. These would build on the recent large investments by Sabic in shale gas receipt and processing, MGT in biomass power and Sirius in potash.

The pharmaceutical sector continues to prosper and I was pleased to hear about the leading work at MSD Cramlington in continuous pharmaceutical production. It was also good to hear of Glaxo Smith Kline's investment intentions at Barnard Castle shortly after the EU referendum.

The decision to leave the European Union is a major issue for the industry and as I write some early effects are being seen, particularly the large fall in sterling.

This potentially makes UK manufacturing more competitive, although increases the price of imported raw materials and equipment. No company in the manufacturing sector would make investment decisions based on short term currency fluctuations but the signs are already positive with Nissan showing renewed commitment to the region.

It remains to be seen what form the eventual "Brexit" will take but I am optimistic for industry. Innovation and facing challenges are daily life for our managers and I'm sure that we can rise to meet the opportunities of the new landscape.

Changes at government level mean there is now a Cabinet Minister, Greg Clark, with "Industrial Strategy" in his job title. You can be sure that NEPIC, along with others in the sector, will be playing our part in influencing him and being from Middlesbrough he will be familiar with many of the issues and opportunities in the region.

The demise of Redcar steel works was a sad event but a new South Tees Development Corporation is being established which should give further help to those planning to invest.

Early in 2016, I made a speech at the NEPIC awards dinner and mentioned the constant environmental challenges we face. One example I gave was an issue new to me, that of microbeads in personal care and



cleaning products. By mid-year we heard of government plans to ban them.

The ever rising expectations that our businesses will have minimal impact on the environment throughout their product chain will not go away. Again, those that innovate will identify many opportunities from these trends.

In closing I would like to praise the NEPIC core team for another excellent years' work. Once again the cluster has been rated truly outstanding by European auditors and that rating is a tribute to the team.

I wish all members a very successful 2017.

Jan Swales

Ian Swales

Chairman



CHIEF EXECUTIVE'S SUMMARY

"I URGE YOU TO BE AWARE OF THE 97% CLEAN COAL TECHNOLOGY IMPLEMENTED IN INDIA.

"WE SIT ON ONE OF THE WORLD'S LARGEST COAL RESERVES & SHOULD BE IMPLEMENTING SUCH TECHNOLOGIES HERE." I am pleased to introduce NEPIC's Annual Report 2016. The report marks the completion of year one of our five year strategic business plan for 2015-2020. And, as the report will demonstrate we've made a strong start.

The year commenced with the implementation of a new membership fee arrangement agreed at the last AGM. Our core membership of over 300 companies supported us through these changes and we have continued to recruit new members throughout the year. As the year draws to a close, we currently have 330 fully paid up cluster members.

NEPIC's business plan, approved by the Industrial Leadership Team, was predicated on NEPIC gaining two public sector European funded projects, one in the Tees Valley and one within the NE-LEP area. These have indeed been secured thanks to some great work from our project leaders and the team respectively.

We did, however, have to begin these projects "at risk" with verbal approvals due to Brexit delays. We had hoped that funding would commence by at least mid-2016, unfortunately this has not been the case. The contracts are now in place and we should soon be in receipt of payment for our work with SMEs, back-dated to January. The cluster's reserves have helped us through this period.

We also put a significant line in the sand this year with regards to the

competitiveness of industry on Teesside. Forty-six member companies collaborated on the Tees Valley Integration Study, led by NEPIC and supported by MPI, TVU and Jacobs Engineering.

This piece of work identified over 100 symbiosis opportunities for the companies concerned, as well as 10 chemistry set investments that we can progress and a significant raw material opportunity for the region's industry. NEPIC is currently working through the symbiotic opportunities, with the latter two elements being incorporated into the Tees Valley LEP's growth funding ask of Government. We await the outcome of these recommendations.

NEPIC has played a central role in tackling the imposition of a Special Protection Area on the River Tees by Natural England, which could have significantly hindered industrial development. Working with our members and other river users, we secured more time to respond and ultimately enabled a collaborative way of working with all the agencies concerned. INCA, the Industry Nature Conservation Association, has now taken a lead on this matter and we hope to turn this potential negative into very much a positive way of working with all parties involved long into the future.

The continual development of business networking opportunities for our members remains a top priority and increased opportunities have been delivered through events such as Meet the Members, Cluster Connect, Pharma Connect, Golf Day and Annual Dinner – with all proving a great success. The turnout, discussions and feedback at all NEPIC events are uplifting and overwhelmingly positive.

We hope to continue and grow these member meetings into 2017 and encourage more and more business-to-business opportunities to emerge. On a more specific note, we are always interested in bringing our Cluster Connect meetings to member's premises, so do let me know if you are interested in being one of our hosts where you can showcase your business and premises to local companies.

Finally, we cannot forget that 2016 was the year of the BREXIT vote. I have to say that the overall response of businesses has been one of shock and surprise.

Leading up to the referendum I personally participated in some five business polls, including one at our own Meet the Members conference and all five saw 70%+ opting to remain in the EU.

However, the public, for the reasons we all now know, voted differently. There is no doubt though that we have seen a slowing down of investment enquiries and project approvals across this period. Industry investors appear to be waiting for clarity on the UK's post-Brexit regulatory framework. But it is not only about markets, much of the uncertainty in industry today stems from the impact of politics in regulatory areas such as employment, energy, environmental, safety and planning.

Despite these challenges, our international marketing of the region, industry and members continues. We have very strong relationships in Europe, India and Japan, as was reflected in our biennial bioresources conference in September. Low carbon and bioresource-based investment projects from as far afield as India, New Zealand and the USA were presented and we are working to encourage these investors to consider the North East of England for their next project.

Going forward, NEPIC will continue to keep abreast of the new innovation technologies that could be game changers for our sector. Looking into 2017, we hope we can report positively on increased investor activity and that step change technologies, such as carbon capture and usage, begin to gain traction.

In this respect, can I urge you to be aware of the clean coal technology implemented in India by Clean Coal Technologies that was announced in October? This is a company that we have supported and brought to this region. Despite the British Government funding this innovation to the tune of £4.2m, the technology has been implemented in a coal field in India with 97% capture of the carbon dioxide. The North East of England sits on one of the world's largest coal reserves and we should be implementing such technologies in this region.

I would also bring to your attention a new technology developed in the USA, where a photovoltaic cell with a catalyst and hydrogen has converted carbon dioxide into syngas. This is the type of technology industry needs to practice here and I hope to see it on our event agendas in the not too distant future.

I would also like to take this opportunity to thank you, our members, leadership team and cluster participants for your continued support and endorsement. Engagement at every level is crucial to the clustering model and we simply wouldn't be here without you.

We will continue to work tirelessly on your behalf, addressing the keys issues outlined by industry, to provide you and your business with a sustainable business environment in which you can grow and prosper.

Finally, I would like to pay tribute to the team here at NEPIC. It is only as a result of their hard work and commitment that I can report the progress we have made in the past twelve months.

I wish you a prosperous 2017.

Stan Higgins

Stan Higgins

Chief Executive Officer



CLUSTER SUMMARY

"WE HAVE ENABLED THE CAPTURE OF £50.5M PER ANNUM OF GVA FOR THE REGION & ACHIEVED A ROI OF 33.6 TIMES GOVERNMENT'S INVESTMENT OF £1.5M OVER THREE YEARS."

The past year has seen a significant burst of project work aligned to the strategy set by NEPIC's industrial leadership team. The key themes of supply chain development, industry sustainability, international promotion, membership connectivity and increasing partnership activities with other agencies have been central to our work. In this last case our contribution to industries' input to a UK Industrial Strategy. Here we look into these specific themes in more detail.

Supply Chain Development

March 2016 saw the end of the hugely successful Regional Growth Fund supported Business Acceleration for SMEs (BASME) project. NEPIC secured the help of 180 mentors from industry who helped us interact with 423 local SMEs. As a result, participating companies reported that this work helped them to secure £50m of new business and certified that it assisted in the creation of 1,010 new jobs.

In GVA terms, even using an engineering supply chain GVA level of £50k per job, this means we have enabled the capture of £50.5m per annum of GVA for the region and a return on investment of 33.6 times Government's financing of £1.5m over three years. The project's third party audit, which is available in full on the cluster's website, states the key success factors were "the organisational credibility and reputation of NEPIC; the personal experience and credibility of members of the delivery team; the willingness and capability of the team to provide some of the mentoring themselves in addition

to mentors from larger firms; the high degree of connectivity of larger firms within the North East; and the goodwill of senior personnel in large companies, often those represented on the NEPIC Leadership team." In other words the "clusters work!"

One of the conclusions of the BASME report was that the learnings must be appreciated by our local LEPs and NEPIC must be supported to continue delivery. We have had a partial success in this area in the north of the region, where we have secured 50% ERDF funding for the SME Growth Programme. In the Tees Valley, a 50% funded programme with partners Teesside University and Materials Processing Institute to identify and grow innovative companies through the Innovate Tees Valley Programme. We feel so much more could be achieved if the full BASME programme could have been funded to continue. Even so, members should still signpost SMEs in their supply chain to us as we now have an outstanding record of helping SMEs to grow their businesses locally and internationally.

Industry Sustainability

The global petrochemical and petroleum derivatives market has changed markedly since 2009 and is still in a state of constant evolution. The impact that this has had on the investment conditions in the Tees Valley region must be recognised if UK plc is seriously committed to attracting foreign direct investment in the future.

In order to compile an accurate description of the Tees Valley Process Industry (TVPI) a survey was developed and circulated to

all the major chemical, material and allied value chain operators in the Tees Valley during Q4 2015. The key objectives of this high level analysis was an attempt to identify existing synergies that might help future investment opportunities for the Tees Valley and also examine potential cost saving opportunities for existing operations. A total of 46 companies worked with us on the survey, which included all of the major operating companies.

Review of the high level study, its responses and analysis has generated a series of findings. Over 160 potential opportunities were identified ranging from small-scale, resource sharing projects or requests for contact details to potential suppliers/customers, through to major investment prospects that have the potential to generate widespread growth through an extended supply chain. The short term opportunities that exist can be categorised under industrial symbiosis, waste value enhancement, asset, product, service maximisation, supply and consumption of surplus heat/steam, purchasing, operational, safety, environmental excellence and infrastructure. Some of these identified opportunities can be progressed by TVPI companies collaborating together without external support.

The medium-to-longer term opportunities include unconventional gas as a feedstock for low carbon process industry and manufacturing growth; quantifying the opportunity presented by exploitation of significant local raw material and mineral

resources; developing a hydrogen economy and the Teesside Collective industrial carbon capture, storage and utilisation project. These identified opportunities will require external assistance in order to be developed.

International promotion

NEPIC continues to work closely with colleagues from UKTI and Tees Valley Combined Authority (TVCA) to support both inward investments for the sector and trade opportunities for individual members. This includes offering local supply chain advice and intelligence on contract types and labour availability. Interestingly, those investors implementing projects that have not sought advice (or chosen not to take onboard) have, more often than not, quickly encountered problems with their projects.

NEPIC again took a trade mission to India in February with several companies once more reporting the identification of new business opportunities following the derisking and guidance with their initial contacts by NEPIC and our partners in India. In September, the Cluster was also invited to an Indian Government led conclave on partnering in India and was supported to do this by TVCA. On all occasions we work to promote this region as the place of choice for foreign direct investment.

NEPIC's relationships in India continues to deepen. NEPIC's chief executive writes a monthly column in the Indian Industries Chemical Magazine. We are also partner for the Indian Chemical



Council's (ICC) annual conference and key Indian industrialists, such as Kamal Nanavaty, the president of strategy for Reliance Industries and Arup Basu of Tata Innovations, have visited the UK to attend the Cluster's local events.

The Global recognition of NEPIC and the region's process industry capability was also increased through the recent NEPIC International Bioresources Conference, where speakers and attendees came from around the World from as far afield as New Zealand, the Americas, Japan, India, Scandinavia and Europe to attend what has been described by participants as one of the best technical events presented anywhere. One attendee wrote the following day: "what a pleasure it has been for me to come to the NEPIC conference yesterday. The congress was really well organised, with perfect timing, high level speakers and very interesting topics highlighting the potential of the UK. The NEPIC team is exceptional too, it was a real pleasure to attend. It was simply outstanding." Dr Anne Delille (Materalia, France).

Through NEPIC's CEO's position as European Cluster Manager of the Year 2014-16, interactions with Clusters around the World increased and NEPIC assisted with the strategic development of Clusters elsewhere when time permitted. This has further increased the knowledge of the North East industrial capability with Clusters from Finland, Japan and Germany visiting throughout the course of the year.

Furthermore, NEPIC has published in excess of 50 articles in international process industry publications over the last 12 months on matters relating to business, economics and technical subjects – all with the intention of raising the profile of this industry, our region and supply chain capabilities.

Increasing Membership Interactions

The quarterly NEPIC industrial leadership team meetings attract some 30+ attendees from across the sector and continue to be well supported.

The Cluster's social events, including the annual dinner and golf day, go on from strength-to-strength. The thrust team structure remains strong with teams meeting as required, with some groups getting together quarterly and others, such as the GDP growth team, only needing to meet every couple of years to review and set our strategy.

Our newest events, including the monthly Cluster Connect and half yearly Pharma Connect meetings, have all been "sell outs". These meetings have certainly enabled more supply chain interactions and we have to thank many of our members for enabling these to be held at their premises.

NEPIC's consultancy work is expanding with many companies taking advantage of NEPIC's Customer Centric Market Review activity. Some very substantial corporates and many SMEs have now used this approach with high praise for the new business that it has helped them identify.

In addition, the revamp and relaunch of the Cluster website, Directory and FocalPoint are all aimed at encouraging more member-to-member interactions and raising the profile of supply chain capabilities.

Partnership Working

Aside from the SME projects that we are working with partners to deliver, NEPIC has worked nationally with UKTI, the Chemical Industries Association and other sector and business bodies.

Considerable effort has been put into supporting the Chemical Growth Partnership (CGP) team activities, particularly the supply chain group and the energy and raw materials group, where we have tried to gain traction nationally for growth issues such as energy pricing and new raw materials including syngas from underground coal gasification and clean coal through carbon capture and usage technologies.

NEPIC's work on integration through the TVPI report has been admired by those involved in the CGP, with papers drafted to see if the same methodology could be applied to other chemical region's in the UK.

INDUSTRIAL STRATEGY

WHAT THE CHEMICAL PROCESS SECTOR NEEDS FROM A UK INDUSTRIAL STRATEGY

One important piece of work undertaken by the cluster has been informing Government in relation to a North East Industrial Strategy. NEPIC submitted a paper on the needs of our sector via the Chemical Industries Association and Chemistry Growth Partnership, which we feel is of such importance that we have reproduced it in full here:

Industrial Strategy: Our requirements

NEPIC's members have been considering what the chemical process industry requires from a UK industrial strategy. We have canvassed cluster members and pulled together the following collective view.

Governments and Ministers must recognise that Industry and individual businesses require policy regimes that are both stable and consistent as they have a very significant impact upon final investment decisions. In asset intensive industries like chemicals. plastics and pharmaceuticals and bioprocessing a medium to long term consistent strategy is an absolute necessity to encourage the rejuvenation and growth in the sector. Therefore from our perspective any future UK Industrial strategy must support and underpin the growth of UK industry aiming to ensure it can become sustainable and globally competitive in the longer term.

An integrated strategy is needed which links the underlying materials producing sectors such as chemicals and steel to the downstream sectors including automotive, aerospace, personal care, agrochemicals and food. This alone could lead to a

significant improvement in the balance of payments of the Country. The strategy should also encompass key supporting services such as engineering and logistics. Until now, since this government has been in power, under the auspices of former Minister Vince Cable, we have been discussing individual sector strategies, which can be useful, but to be most effective they must be integrated and not be in isolation. For example in plastics and polymers the automobile sector will source worldwide without consideration of the wider UK balance of payment impact while at the same time UK polymer manufacturers are then forced to move their units off shore and we see huge quantities of the stuff being imported.

A classic example of this lack of joined up industrial thinking in the past was when we warned government and officials of the impact of the loss of the country's only ethylene oxide plant. How it would hit the UK balance of payments to the tune of over £5 billion. The powers that be could not understand how this could happen and did nothing to help. After all the unit only employed 70 people. Six months later they came back to us and apologised as they saw within months almost every drop of surfactant that the country uses in soaps, softeners, cosmetics, and industrials like oil field chemicals etc. suddenly being imported and several downstream factories consequently moved offshore. These examples more than emphasise the need for an overall industrial strategy and the chemistry using and processing

industries believe the following areas to be absolutely vital:

A strategy which provides options for both long-term global competitiveness and security of supply of energy and feedstock; and commits to making best efforts to fully exploit and optimise its natural assets e.g. shale and coal and also remaining North Sea oil and gas resources. The strategy should also encourage both energy and material efficiency and exploit symbiotic opportunities especially in areas of high industrial concentration.

A strategy which is aligned to a UK low carbon future and use of intrinsic carbon resources as long as they are complimented with ways to minimise CO₂ emissions via usage and sequestration. It should also recognise the need for the chemicals industry to transition from fossil-based feedstocks and incentivise their efficient use, as well as the introduction of renewable alternatives. The strategy should embrace the bio economy and the opportunities it brings to UK-based industry.

A strategy which connects the building blocks produced by the chemistry-using and other materials producing industries with the downstream advanced manufacturing sectors i.e. understands the importance of such materials to these sectors and the key gaps within the supply chain where there are opportunities for UK industry. There is a real chance to improve the UK balance of payments by using more locally produced materials in downstream sectors.

A strategy which optimises the benefits of key manufacturing clusters e.g. the integrated process industry on Teesside, Humberside and Grangemouth and supports their longer term competitiveness against other locations in Europe and globally. There is a real opportunity in locations such as Teesside to develop a powerful integrated supply chain and create more wealth and employment.

A strategy of 'joined up' thinking and implementation incorporating, where appropriate, targeted Government intervention that can be in the form of infrastructure, scoping studies or policies and which always is in support of, and underpins the overall objectives. Any interventions should pass this test e.g. - Does this help with energy security? Does this support our CO₂ reduction goals? Interventions should also provide direct support to industrial developments and not just research based programmes via universities and other Centres of Excellence.

A strategy which ensures that all relevant Governmental and local Government departments are aligned. This should include UKTI, Innovate UK, KTNs and Local Enterprise Partnerships. Supporting structures should be determined by the strategy, be simple and transparent and should be built on best practice globally. Industry regulators should also work with industry to develop mutually agreed objectives which support industrial strategy and address regulatory objectives.



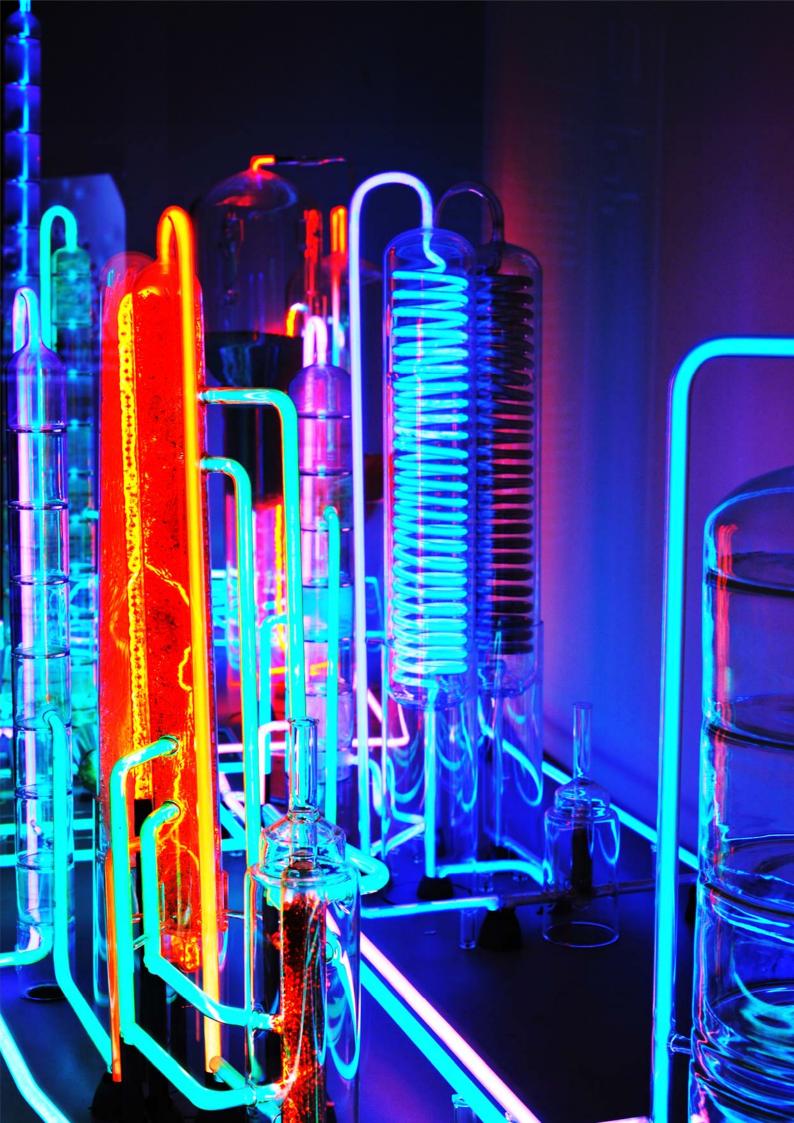
A strategy which embraces the UK as a destination for inward investment including clear and simple ownership and decision making processes at both national and regional level. It should also address all of the issues investors see as important including marketing the advantages of manufacturing in the UK and the specific advantages of its regional clusters.

A strategy which reinforces the continuous development of a skilled workforce and also improves productivity and efficiency to meet the challenges of global competition.

Regarding BREXIT, the strategy needs to address the loss of EU grants but also see this as an opportunity to use any replacement funding in the most appropriate way. Also, the materials and chemicals sector, as the most significant exporters to EU countries, need to be able to continue to have access to this market and not face tariff barriers. The opportunities for industry post BREXIT should also be addressed.

The strategy needs to be owned in partnership by Government industry trade associations and Industry Cluster bodies and its implementation supported financially with appropriate programmes and infrastructure projects. What is more the voice of individual companies must not dominate in its implementation.

Submitted October 2016.
Government responses will be communicated in due course.



STRATEGIC REVIEW

MEASURING PERFORMANCE AGAINST STRATEGIC INTENT

This discussion is intended to bring our strategy and strategic intent alive by demonstrating performance outputs against key performance indicators.

Industry growth & strengthening the supply chain

KPI Investment projects portfolio

Current portfolio of investment projects = 23 live projects (82 completed)

KPI Formal GVA creation in public supported projects & programmes

Total = £3.34 Billion, per annum = £0.56 Billion

Statement

This is the key strategic aim of the Cluster as set by its members. Therefore, NEPIC continues to help secure and deliver capital projects across North East England by marketing the region's capabilities and helping investors with local intelligence and supply chain information that is more detailed and is available from local authorities. *Our KPIs only include those projects with a high probability of delivery.*

Although the Brexit vote seems to have slowed down enquiries, two of the biggest existing projects in the portfolio, MGT power station and Sirius Polyhalite Mine, have been progressing.

Wilton 11 has been competed this year and the SABIC imported shale gas project is well underway. Disappointingly, the Air Products Gasification unit has been halted and the global oil price fall has delayed the SNF oil field chemicals project at Billingham.

Ensuring an effective cluster executive is in place, trained & financed

KPI ESCA Quality Audit / Gold Standard

NEPIC was re-audited and secured the Gold Standard quality mark until 2019.

KPI Cluster Finances / Remain Positive

2015-2016 accounts show a surplus and a small reserve. Members agreed to increase fees in 2016, which have helped to secure the Cluster's finances.

KPI Staff Training Budget

A training budget has been maintained and used for Marketing & Sales and CPD on Cluster Management related issues.

Statement

NEPIC's corporate accounts, which are discussed within the Business Operations section of this report, remain approved by third party audit for submission to Companies House. The European Union continues to push for excellence in Cluster Management as a profession and the ESCA Gold Standard is part of that. Over 3,000 Clusters have been audited worldwide and only 70 have gained the Gold Standard. This has given NEPIC a lot of international credibility and recognition that culminated in Stan Higgins becoming the EU Cluster Manager of the Year 2014-16. Stan passed on his title in November 2016.

Growing cluster participation - membership numbers & network interactions

KPI Paid Membership Figures

NEPIC Paid Members = 325 a fall from 350 following membership fee increase

KPI Networking Events

Attendance = 1739 attendees in 2016 to date

KPI Project Engagement of SMEs

COMPLETED PROJECTS
BASME = 423 (target 400)
DEELOCSI = 120 (target 120)

NEW PROJECTS
Innovate Tees Valley = 50 (target 100 over 3 years)
NELEP SME Growth = 21 (120 over 3 years)

Statement

The 2016 event attendees will exceed 2,000 with events such as the MP's Westminster meeting, AGM and Cluster Connect all taking place before the end of the year. The biggest disappointment this year is the failure to secure more paid memberships from amongst the SME community, particularly from amongst the BASME SMEs. Current members could help by encouraging their supply chain companies to participate.

Completion of the BASME and DELOCCSI projects demonstrated the engagement and mentoring capability of the Cluster and its members. This project was supported by £1.5m of Regional Growth Fund, NEPIC identified 180 industrial mentors who gave £3.25m of their time in-kind to the project so that 423 SMEs could generate £50m of new business and add 1010 jobs.

Our efforts to keep these projects afloat have resulted in us securing TV and NELEP support for Innovation and Growth mentoring projects over the next 3 years. These projects have all had good starts despite arduous contract negotiations with funding bodies.

NEPIC events continue to be well attended and popular. Monthly Cluster Connect, Pharma Connect and social networking events, such as the annual awards dinner and golf day, are typically fully subscribed. Our biennial International Bioresources Conference has been gaining international accolades as one of the best conferences of its type anywhere in the world. We have also received many congratulations for our annual Meet the Members Conference at Wynyard Hall with over 500 delegates and 100 exhibitors in attendance this year.

Building collaborative business & technical projects to address sector issues

KPI Number of Collaborative Cluster Projects

2016 Active Projects = 7 2016 Unsuccessful or ongoing applications = 7

Statement

The Cluster Management team has worked to secure a number of EU funds to support industry wide innovation and growth projects. 10 project applications have been made during the last year with local and European partners. (The success rate in Horizon 2020 is thought to be \sim 15%)

NEPIC has secured 2 ERDF projects (SME Growth & Innovate Tees Valley) and one H2020 project (Sharebox) during this period. We await news on a further two H2020 projects - Steel2Chemicals & Vitamin. We also secured some funding from Tees Valley Combined Authority and MPI to enable the Tees Valley Integrated Industry study to move ahead.

In addition, NEPIC enabled the industry to respond collectively to Natural England's Teesmouth SPA proposal, the Chemical Growth Council's Industrial Strategy and Low Carbon Agenda, the Hydrogen Economy Developments, Carbon Capture Usage & Storage, Activist Picketing of local capital projects.

Promoting the process sector & industry locally, nationally & internationally

KPI Number of International Promotional Activities

2016 International Expeditions and Conferences = 8 (India 2, Scandinavia 2, Europe 4)

KPI Number of Published Articles

Articles & Press Releases Published in 2016 = 46

Statement

NEPIC made presentations at numerous international conferences throughout 2016. The Cluster's relationship with the Indian chemical industry goes from strength to strength, with NEPIC assisting in the development of the 2016 ICC Annual Outlook Conference. To date, 52 companies have joined NEPIC on Trade Missions to India. In 2016, NEPIC were also asked to speak at the Indian Government Supported "Partner with India" conference.

Stan Higgins also writes a monthly column in the Indian Chemical Industry News and is the publication's only foreign correspondent. His 50th article will be published by the end of 2016. Furthermore, articles submitted by NEPIC have been published in the Chemical Engineer, Process Engineering, Chemical News and Chemistry & Industry, as well as several regional and national, newspapers and business magazines.

Improving stakeholder communication & maintaining dialogue with other sectors bodies

KPI Number of Partner Organisations in the UK

NEPIC has arrangements in place with 19 partner organisations

Statement

NEPIC has 19 UK partner organisations with whom we have formal or informal contribution arrangements and include:- Tees Valley Unlimited/Tees Valley Combined Authority, North East Local Enterprise Partnership, The Centre for Industry Education, EEF – The Manufacturers' Organisation, The Federation of Small Businesses, North East of England Chamber of Commerce, Northern Offshore Federation, North East Automotive Alliance, RTC North, Department for Business, Energy and Industrial Strategy, Chemistry Growth Partnership, Chemical Industries Association, UK Trade & Investment, Cogent, IChemE, IMechE, Royal Society of Chemistry, InnovateUK and Knowledge Transfer Network.

Increasing engagement between companies across our supply chain

KPI Maintain an active database of companies and individuals

NEPIC's CRM includes 3,853 active companies and 9,047 active executives

KPI Maintain a members' directory, newsletter and website

The NEPIC Directory, FocalPoint newsletter and website have all been updated and rebranded to encourage even greater usage and engagement.

Statement

A huge amount of work has been undertaken during 2016 to improve the NEPIC publications and ensure the website is more engaging and user friendly. The Cluster's CRM system has also undergone an overhaul to ensure data accuracy and to prepare for a move to a new system at the end of 2016.

Building deeper international relationships through other process sector clusters

KPI Number of International Cluster-to-Cluster MOUs

Formal MOUs are in place - ICC, PIF, FIERGS, JASTI, CCB, CLUSTERLAND, CEEG/ESCA, VIA and KDPMA.

Statement

NEPIC is working on several EU projects with clusters from across Europe. These include the project Sharebox incorporating industrial symbiosis, Steel2Chemcials focusing on developing a circular economy and project Vitamin which centres on advanced manufacturing. With these projects, NEPIC has the opportunity to widen its already existing wide geographic coverage.

Additionally, NEPIC has assisted in the development of industry clusters in Finland (Kemi) and Norway (Eyde). We also attended the Biennial European Cluster Collaboration Conference to carry out project building discussions with clusters across Europe. NEPIC is also a member of SPIRE, ESPCC and ECRN where we continue to collaborate with EU clusters with specific interests in the chemical process sector.

Furthermore, NEPIC continues to develop Global relationships that include Nagano in Japan and Solidia and the Department of Energy in the USA. Locally, we have worked with RTC North with whom we continue to establish a Super Network of local clusters, incorporating automotive, oil & gas, design, construction, digital and service industries, to drive cross sector innovation and symbiosis.

Guiding & supporting members in upskilling activities

KPI Number of Participating Educational Establishments

In 2016, seven higher education collaborations were in place including the region's five universities - Teesside, Durham, Sunderland, Newcastle & Northumbria - Middlesbrough College and TTE.

KPI Children Challenging Industry Schools Project / Teachers Influenced

In 2016, CCI worked with 28 schools, trained 370 teachers and delivered 779 classroom based science lessons to children, as well as 20 industry visits.

Statement

In 2016, NEPIC, along with partner CIEC, delivered the Children Challenging Industry programme into the North East region – working with schools, teachers and children. The programme provides primary school teachers with the knowledge and confidence to teach science effectively, as well as the materials to deliver industry-based science lessons and reinforcing company site visits. In addition, teachers are provided with resources to assist with future lessons. Studies have shown that this is the most effective way of attracting children into science and engineering.

Over the last year, Government reforms have deepened the responsibility of Employers for skills development of their employees and apprenticeships. NEPIC continues to give input to Government on Skills and Education issues collectively on behalf of its members. Due to this period of reform, the NEPIC Skills and Education Thrust Team has carried out a survey of members to understand how NEPIC can best support employers. This work has helped us understand that Members would like the key issues to be identified, interpreted and communicated in a summarised form with links to the primary source of information e.g. by electronic means.

CURRENT PROJECTS

NEPIC IS CURRENTLY
UNDERTAKING FOUR
PROJECTS THAT
SECURED FUNDING
DURING 2016,
INCORPORATING
INNOVATION, BUSINESS
GROWTH, SUPPLY
CHAIN CONNECTIVITY,
RESOURCE EFFICIENCY
& INTEGRATION. A
SUMMARY OF EACH IS
PROVIDED HERE.

Innovate Tees Valley

NEPIC, in conjunction with Teesside University, Materials Processing Institute (MPI) and Digital City, are partners in an ERDF project utilising European Structural and Investment Funds (ESIF) funds, to seek to innovate Tees Valley and to accelerate growth from ideas of SMEs.

To encourage more companies in the Tees Valley to innovate the project partners above, will provide intensive support through their sector experience and knowledge. SMEs will be supported through the innovation process from market mapping, through raising of investment, commercialisation and prototyping to implementation.

SME Growth

The SME Growth programmes offers help to SMEs across a number of areas. One of these is Marketing and is probably the closest to what this project is offering and consists of elements such as Market Research and CRM Strategies. We intend to teach SME managers about the fundamentals of selling, something technology companies in particular appear to lack. This is different but complementary to the Business Growth Service offering.

Market research is clearly important yet very difficult to do, especially where large companies are the target. Our project, by using mentors from these companies, will significantly shorten the market research phase and greatly increase the

quality and relevance of the information gained. From experience, we have found that energy management is an attribute little valued by SMEs. This project is unique in addressing this in order to increase SMEs resource efficiency.

NEPIC will provide sector specific market access, something not available via the Business Growth Service. Our project will also be delivered by Project Managers who have many years' experience in the process sector, again able to offer specialist sector specific advice to enter a large regional market.

Tees Valley Process Integration Study (TVPI)

The global petrochemicals and petroleum derivatives market has changed markedly since 2009 and is still in a state of constant evolution. The impact that this has had on the investment conditions in the Tees Valley region must be recognised if UK plc is seriously committed to attracting foreign direct investment (FDI) in the future.

In order to compile an accurate description of TVPI commencing in Q4 2015 a survey questionnaire was developed and circulated to all the major chemical, material and allied value chain operators in the Tees Valley. The key objectives of this high level analysis were an attempt to identify existing synergies that might help future investment opportunities for the Tees Valley and also examine potential cost saving opportunities for existing operations.

A total of 46 companies responded to the survey which included all of the major operating companies. Review of the high level study, its responses and analysis has generated a series of short, medium, long-term development and investment opportunities.

The report summarises the findings of the analysis and presents the "Asks of the UK Government" and how local and national agencies can help to support the projects identified by the participating companies – with NEPIC continuing to coordinate industry's needs.

Sharebox

Resource efficiency offers a major economic opportunities for the European Process Industry, both in terms of cost savings as well as opportunities to offer greener products and services. Industrial Symbiosis (IS) is the use by one company or sector of byproducts, including energy, water, logistics and materials, from another.

The approach that underpins SHAREBOX centres on logical work flow that covers from the identification of new symbiotic synergies right through optimised connections among companies and organisations in established symbiotic relationships. SHAREBOX will provide plant operations and production managers with the robust and reliable information that they need in real-time in order to effectively and confidently share resources (plant, energy, water, residues and recycled materials) with other

companies in an optimum symbiotic ecosystem. Further details can be found via www.sharebox-project.eu

PENDING PROJECTS

FOUR PROJECTS
CURRENTLY REMAIN IN
PROPOSAL PHASE
WHILST WE AWAIT THE
OUTCOME OF
FUNDING DECISIONS. A
SUMMARY OF EACH IS
PROVIDED HERE.

VITAMIN Project

In the manufacturing sector, the prosperity of Europe relies on its ability to succeed in the competitive global marketplace and to challenge economical, technological and environmental constraints.

To meet consumers' needs, companies need a clear vision and mentoring to implement a new business model relying on the integration of a new technology. Among new innovative digital technologies, additive manufacturing (AM) offers a huge potential to directly manufacture complex and high functional virtual 3D products by adding of successive layers.

The VITAMIN project will analyse the industrial needs (in aeronautics, mechanics, tooling sectors) and support them to implement AM in their production lines

Steel2Chemicals

The main objective of the Steel2Chemicals proposal is to enable novel systemic, eco-innovative solutions for converting waste streams into chemicals and materials by a breakthrough novel "Fischer Tropsch" technology platform that enables the creation of new circular value chains, hitherto unfeasible.

A Large Scale Demonstration (TRL 5/7) project will be showcasing how to bridge a technoeconomic gap and build the missing "waste2resource value chain" link between the steel making and chemicals industries, while improving their competitiveness. New "value"

chain configurations re-designs" and cross-sectorial business models will be designed and validated to maximize the potential of replication to a number of locations in Europe.

ServMod

The challenge of SERVMOD is the modernization of traditional industries using as a driver servitization processes in SMEs, identifying opportunities in the cooperation with companies from another sectors to build-up new products/services creating value for the customers.

The strategic objective is to identify and validate innovative servitization projects involving SMEs from different sectors and regions that will be implemented immediately.

GoesFar

250 SMEs drawn from multiple regions of Europe will receive business acceleration from process industry industrialists. From 250 SMEs engaged, 100 SMEs will go on to receive in-depth mentoring from a number of incountry targeted specialist industrialists (mentors) generating significant jobs (400) and new business revenues (>€20M) over a 3 year period. ■



FINANCIAL STATEMENTS

INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED MARCH 2016

	2016	2015
	£	£
Turnover	1,068,997	1,627,529
Cost of sales	309,589	490,650
GROSS PROFIT FROM BUSINESS ACTIVITY	759,408	1,136,879
Other income		
MI allowance received	2,000	2,000
Exchange gains	1,271	·
Bank interest receivable	234	234
GROSS INCOME (A)	762,913	1,138,924
Expenditure		
Admin costs & expenditure	733,327	1,092,556
Finance costs (bank charges)	1,062	1,242
Depreciation	4,053	2,346
GROSS EXPENDITURE (B)	738,442	1,096,144
Surplus for the financial year	23,931	42,780

BALANCE SHEET FOR THE YEAR ENDED MARCH 2016

	2016	2015
	£	£
Fixed assets		
Tangible assets	12,107	10,337
Current assets		
Debtors	145,298	290,950
Cash in the bank & in hand	511,303	737,553
	656,601	1,028,502
Creditors		
Amounts falling due within 1 year	408,452	797,622
Net Current Assets	248,149	230,880
Total assets less current liabilities	260,256	241,217
Reserves		
Profit & loss account	260,256	241,217
	260,256	241,217

The Company Secretary comments on the audited accounts:

The statements show a surplus of £23,931 which is unchanged from the management accounts for the period. The only amendment is the inclusion of a tax provision of £4,892 leaving £19,039 to be transferred to reserves. Total reserves at the balance sheet date amount to £260,256.

Turnover for the 2016 year was £1,068,997 down 34% from the previous year due to public projects coming to an end. Profitability was maintained by project staff leaving as their projects came to an end.

The audit of the statements is complete and the auditors have issued a clean report.

The full report of the Directors & Financial Statements for the Year Ended 31 March 2016 for the North East of England Process Industry Cluster Limited is available within the official Annual General Meeting notification. ■

BOARD OF DIRECTORS

IAN SWALES, CHAIRMAN
Partner at AIJ Partners & former Member of Parliament for Redcar

MARK KENRICK, VICE CHAIRMAN Director of Safety & Risk Management at px Group

RICHARD SMITH, VICE CHAIRMAN Managing Director at Surfachem Ltd (2M Group)

STAN HIGGINS, DIRECTOR Chief Executive Officer at NEPIC

STEVE BAGSHAW, DIRECTOR Chief Executive Officer at Fujifilm Diosynth Biotechnologies

MARTIN INSKIP, DIRECTOR
Consultant & former Site Director at MSD

MARTIN PORTON, COMPANY SECRETARY Financial Director at RTC North

THE NEPIC **TFAM**

PHILIP ALDRIDGE

Project Manager, Pharmaceuticals & Biotechnology

philip.aldridge@nepic.co.uk

JOHN BRADY

Director of Projects, Industry

john.brady@nepic.co.uk

EBBA MCGUIGAN

Marketing & Commercial

Manager

ebba.mcguigan@nepic.co.uk

DAVE ROBSON

Project Manager, SME Growth & Innovate Tees Valley

dave.robson@nepic.co.uk

JUSTIN WILKINSON

Marketing Systems Executive

justin.wilkinson@nepic.co.uk

Find out more about the team at: www.nepic.co.uk/blog/staff/

LYNNE AUNGIERS

Office Manager & PA to CEO

lynne.aungiers@nepic.co.uk

LOUISE GWYNNE-JONES

PR & Communications

Manager

louise.gwynne-jones@nepic.co.uk

FELIX O'HARE

Director of Projects, SMEs & Supply

Chain

felix.ohare@nepic.co.uk

LIZ ROONEY

Interim Membership & Commercial Manager

liz.rooney@nepic.co.uk

KATH BIRKIN

Project

Administrator

kath.birkin@nepic.co.uk

STAN HIGGINS

Chief Executive

Officer

stan.higgins@nepic.co.uk

VICTORIA PEPPER

Senior Graphic

Designer

victoria.pepper@nepic.co.uk

JOANNE ROUT

Project Manager, Industry

& Academia

jooanne.rout@nepic.co.uk



NORTH EAST PROCESS INDUSTRY CLUSTER LTD

The Wilton Centre, Wilton, Redcar TS10 4RF United Kingdom www.nepic.co.uk +44(0)1642 442560