A ‘breakthrough’ year for Industrial Symbiosis

Flagship Initiative for the Europe 2020 Strategy: Roadmap for a Resource Efficient Europe

The European Commission is developing a Roadmap for a resource-efficient Europe as part of the resource-efficient Europe Flagship Initiative of the Europe 2020 Strategy. **Industrial Symbiosis is embedded within the Roadmap** with the Commission clear that opportunities to exploit resource efficiency gains through industrial symbiosis should be a priority for all member states. NISP is cited as a best practice exemplar of concrete action already being taken by member states and as an approach that should be replicated throughout the European Union, having previously been cited as best practice within the EU Waste Framework Directive. Should the Road Map proceed to become a ‘white paper’ then member states would be obliged to carry out the recommendations.


European Commission Economic Analysis of Resource Efficiency Support

The European Commission’s Directorate General for Environment is soon to publish a comprehensive new study undertaken by the COWI Group, which reviewed and analysed 120 resource efficiency policies from 23 countries to identify policies that have most successfully optimised the use of resources and provide a blueprint for replication across Europe. Of the policies reviewed NISP was identified as providing **“the highest economic benefit to the companies involved”** and achieving environmental benefits at least cost. The report further suggests that an “EU–wide network has the potential to be even more successful than NISP in England” and concluded that the replication of NISP across the 27 EU member states is recommended because of the huge beneficial environmental and economic impact it would have.

Confederation of British Industry calls for further development of NISP

The influential British business organisation - the Confederation of British Industry (CBI) – has been a longstanding supporter of NISP and an advocate for the benefits of industrial symbiosis for businesses in the UK. In February 2011, the CBI published a new report - ‘Making ends meet’ - that called for Government to review its policies concerning business waste and resource efficiency. This report singled-out NISP as an example of effective and innovative support for business and concluded, “the CBI supports the work of NISP which should be encouraged and further developed”. The support from industry for NISP can also clearly be evidenced by the ever increasing membership within the UK programme, which now stands at more than 14,000 businesses.

http://www.cbi.org.uk/Making Ends Meet

Endorsement from International Institutions

In the last year, industrial symbiosis has risen up the agenda of global institutions as they seek to find innovative solutions to diverse global development issues ranging from economic recovery to sustainable development. In June 2010, the Organisation for Economic-Cooperative Development (OECD) cited industrial symbiosis as a form of systemic eco-innovation **“vital for future green growth”** (see OECD diagram below).
Later in 2010, a World Wide Fund for Nature (WWF) commissioned report highlighted International Synergies approach through NISP as one of the “World's Top 20 Green Game-Changing Innovations”. This recognition has led to a number of institutions including UNEP, UNIDO, UN ESCAP and the World Bank seeking advice and information from International Synergies on the role that industrial symbiosis can play in addressing development issues. Beneath the global scale, International Synergies has also witnessed growing support from the European Union. Janez Potocnik, the European Commissioner for Environment, has praised NISP’s work during an address to the Lisbon Council on Eco-Innovation, March 2010. One of the recommendations of the 10th EU Eco-Innovation conference in March 2011 was that NISP should be replicated across Europe and that the EU should invest in this activity.

Worldwide Fund for Nature: Green Game Changing Report

An award winning year

International Synergies’ NISP project was the winner in the Best Carbon Reduction Project category of the prestigious edie.net Awards for Environmental Excellence, for which we have subsequently been entered into European Business Awards for the Environment for 2012. This award follows ISL winning the British Expertise Award for Global Environmental Impact in 2009 and having been an Eco-Innovation Exemplar for the EU’s Environmental Technologies Action Programme since 2007. Currently International Synergies CEO is short-listed for the Leader of the Year in the Green Business Leaders Awards 2011. The success of International Synergies and NISP in the last year has created considerable media attention, with industrial symbiosis rising up the news agenda in the business-facing publications in particular. In November 2010 the Financial Times published a special report on Climate Change which included the NISP example of industrial symbiosis as an innovative way of addressing Climate Change.

Financial Times: Special Report, November 2010

Expanding industrial symbiosis into new countries

The last year has continued to see the development of applied industrial symbiosis in new countries
throughout the world as International Synergies has brought forward new advanced tools and services. This year has seen International Synergies develop the first ‘how to’ manual for developing a facilitated industrial symbiosis programme and the further development of bespoke synergy management software ‘SYNERGie’, which is now being used in China, Turkey, Brazil, South Africa, Romania, Belgium, Slovakia, UK and Hungary. In the next 12 months, International Synergies is confident that further new projects will commence in Poland, Greece, Argentina and France. An innovative ‘intelligence-based’ pro-active (as opposed to demand led model) for industrial symbiosis that supports the development of regional economic development and regeneration has found its first client in the East of England in the UK.

**Industrial Symbiosis Practitioners International Conference – Birmingham, June 2012**

Looking ahead to the next 12 months, International Synergies and partners including Veolia, Birmingham City Council and URS Scott Wilson plan to host a three-day international working conference on applied industrial symbiosis in Birmingham from June 12-14th 2012. The International Conference will bring together the global community of industrial symbiosis practitioners, business advocates and researchers to share knowledge gained, innovation and ideas.

The Conference will coincide with NISP’s 10th year of delivery in 2012. One objective of the Conference will be to develop a ‘concrete’ action plan for widening the application of industrial symbiosis worldwide and to follow on from the recent recommendation from the European Commission’s Environmental Technology Action Plan Eco-Innovation Conference in Birmingham, which called for a Europe-wide uptake of industrial symbiosis based on the NISP model.

The table below summarises the outputs delivered through NISP in England 2005-2011:

<table>
<thead>
<tr>
<th>NISP outputs and value for money</th>
<th>2005 – 2011 (cumulative)</th>
<th>Investment cost per unit</th>
<th>Lifetime persistence results (5 year period)</th>
<th>Investment cost per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional sales</td>
<td>£179,976,763</td>
<td>£0.02</td>
<td>£899,863,615</td>
<td>£0.005</td>
</tr>
<tr>
<td>Cost savings</td>
<td>£172,088,282</td>
<td>£0.03</td>
<td>£660,446,410</td>
<td>£0.005</td>
</tr>
<tr>
<td>CO₂ reduction</td>
<td>6,991,613 tonnes</td>
<td>£0.83</td>
<td>34,656,065 tonnes</td>
<td>£0.13</td>
</tr>
<tr>
<td>Virgin material saved</td>
<td>10,547,958 tonnes</td>
<td>£0.42</td>
<td>52,739,790 tonnes</td>
<td>£0.08</td>
</tr>
<tr>
<td>Water saved</td>
<td>12,703,548 tonnes</td>
<td>£0.35</td>
<td>63,512,740 tonnes</td>
<td>£0.07</td>
</tr>
<tr>
<td>Waste diverted from landfill</td>
<td>7,780,968 tonnes</td>
<td>£0.56</td>
<td>38,904,840 tonnes</td>
<td>£0.11</td>
</tr>
<tr>
<td>Hazardous waste eliminated</td>
<td>408,358 tonnes</td>
<td>£10.76</td>
<td>2,042,240 tonnes</td>
<td>£2.15</td>
</tr>
</tbody>
</table>