

## **Origin and international expansion of the National Industrial Symbiosis Programme (NISP®)**

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Industrial symbiosis (IS) engages diverse organisations in a network to foster eco-innovation and long-term culture change. Creating and sharing knowledge through the network yields mutually profitable transactions for novel sourcing of required inputs, value-added destinations for non-product outputs, and improved business and technical processes. Various delivery models of IS have developed around the world; key differences are the geographic scale of the effort (organisation to organisation, organisations in a defined area such as an industrial park or zone, across a city or region, national or international) and whether the IS opportunities (called synergies) are actively facilitated by expert practitioners. The model devised and managed by International Synergies Ltd is a facilitated model operating at the national scale in the United Kingdom, and at other scales around the world. International Synergies Ltd has developed global expertise, instigating programmes in North and South America, Asia, Africa and across Europe.

The National Industrial Symbiosis Programme (NISP®) was launched by International Synergies Ltd in 2003 across 2 English regions and in Scotland. In 2005, the UK government provided the investment necessary to roll out NISP® nationally. For the past nine years, NISP® has been engaging different industries (of different sizes and sectors), government bodies and research organisations, to identify and facilitate economically viable solutions to business challenges.

NISP® was identified by the European Commission as the most effective resource efficiency policy amongst 120 reviewed across the world and has been proven to stimulate economic growth, create new jobs, and help businesses make the transition to a low-carbon economy – all while generating a net contribution to the Treasury at outstanding value for money.

The presentation by International Synergies Ltd's Chief Executive, Peter Laybourn, will chart the progression of NISP® since inception, its challenges and success factors, and looks to the future of IS becoming mainstream.

### **Key Words**

Industrial symbiosis, NISP, facilitation, green growth