

NISP  ®

NATIONAL INDUSTRIAL SYMBIOSIS PROGRAMME

Resource Reuse

Overview and Guidance

Delivered by Emma Adam on behalf of NISP NW
(Administered by SKM Enviros)

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**Material change for
a better environment**

NISP is funded by WRAP to provide industrial symbiosis support to businesses in England.

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What is NISP?

- NISP – the National Industrial Symbiosis Programme
- National programme, with regional delivery partners in England, Scotland, Wales and N Ireland.
- NISP managed by Enviros Consulting Ltd in NW England
- Work closely with NWDA, LAs, Envirowise, WRAP, Enworks & Envirolink Northwest.
- Northwest sector focus: manufacturing, construction, chemicals, food and drink sectors
- NISP is devised and managed by International Synergies Limited.
- NISP is funded by the Waste and Resources Action Programme (WRAP) to encourage and promote industrial symbiosis in England.

What is Industrial Symbiosis?

“Industrial symbiosis brings together traditionally separate industries and other organisations to achieve competitive advantage involving the physical exchange of materials, energy, water and/or by-products together with collaboration on the shared use of assets, logistics and expertise.”



“One of the main objectives of NISP is to effect cultural change: encouraging industry to look beyond traditional markets for business opportunities.”

Peter Laybourn, NISP Director

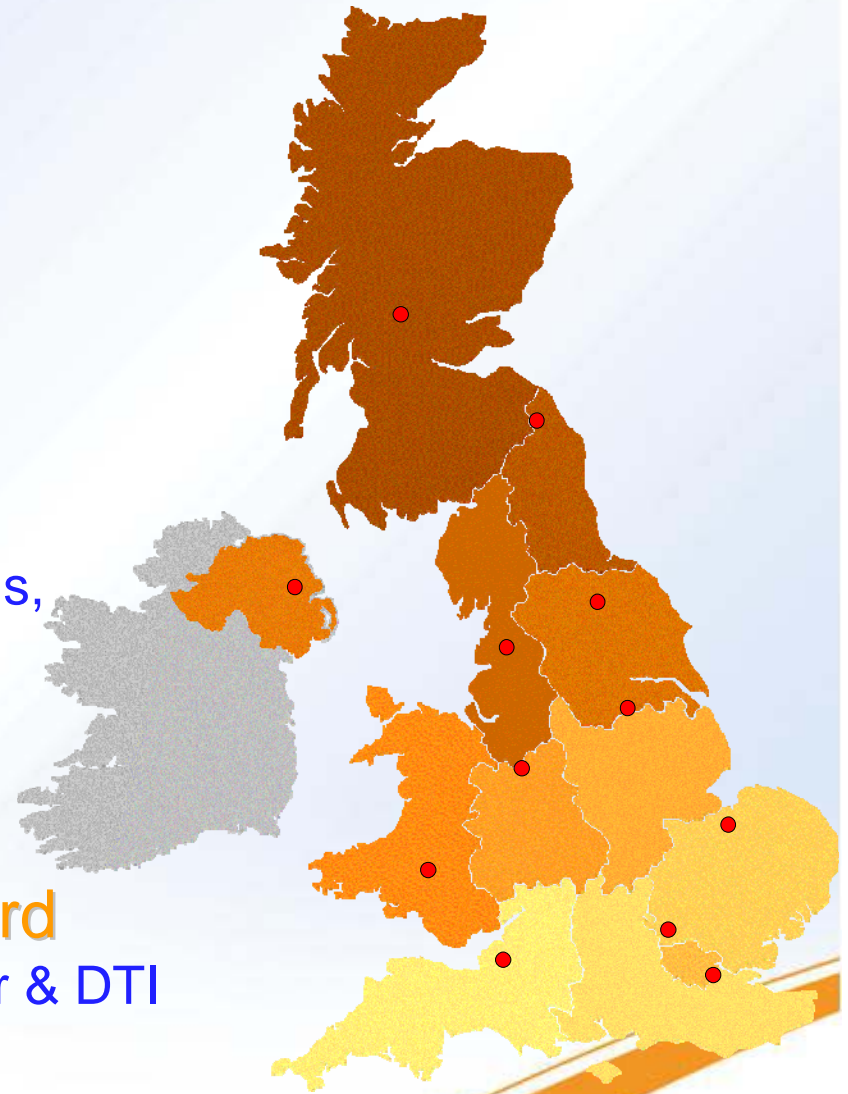
Where can you find us?

12 regional NISP offices
across the UK

12 business-led Programme Advisory
Groups for support & engagement

Membership includes multinationals, SMEs,
Micros, Entrepreneurs from all sectors
– NISP is **diverse** and **inclusive**

Independent board
including Defra, Regulator & DTI



How do we work?

- Encouraging companies to think about resources more sustainably
- Gather intelligence / research markets
- Helping find new outlets for materials, energy and resources
- Stimulate negotiation and discussion between businesses
- Facilitate negotiations
- Follow synergies through to completion

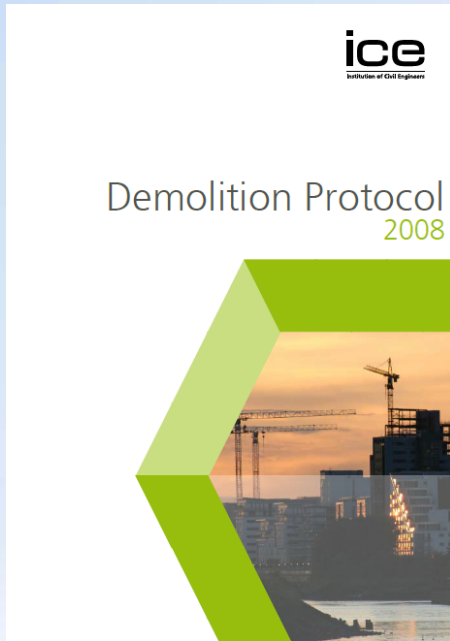
Nisp – South East: Crushed Concrete – free collection, free up space

- Interserve had some surplus crushed concrete
- NISP reviewed local memberships & found a solution that resulted in the material being taken for free
- Hanson aggregates were willing to take the material for use as secondary aggregate
- **CO₂ Reduction: 61 tCO₂e**
- **Cost Savings: £15,000 (disposal/recycling costs avoided)**
- **Additional sales secured for Hanson**
- **Landfill Diverted: 600 t**
- **Virgin Materials: 622 t**
- **Water: 22 te**

Mapping out route to waste reduction

- Birse civils construction of new link road
- Looking for a sustainable material to use for the diversion of the canal
- NISP helped to source a supplier of tyre bales reducing the need for steel and aggregates. The bales were recovered by the supplier after use
- The synergy resulted in a cost saving to **Birse Civils Ltd of £40,000.**
- **A CO² reduction of 375 tonnes was achieved, with a saving of 1,000 tonnes of virgin material and 6,000 tonnes of water.**
- **Credential Environmental benefited from £9,000 in additional sales.**

Demolition Protocol



- Pre demolition audit – assess the quantity and type of available materials (and the value (£))
- Demolition Recovery Index (DRI) – KPI that assesses the proportion of materials that are reused (not landfilled)
- Retained Materials Index (RM) – The proportion of materials retained on site

Component	*Recovery Potential	In situ Quantity	Unit	Demolition Recovered Material Potential	Demolition Recovery Index	Demolition Recovered Material Target
Concrete	RCA	2,500.0	Tonnes	2,000.0	80%	2,000.0
Non-concrete masonry	RA	1,000.0	Tonnes	750.0	75%	750.0
Non ferrous metals	Scrap	250.0	Tonnes	237.5	95%	237.5
Ferrous metals	Scrap or reclamation	150.0	Tonnes	142.5	95%	142.5
Wood	*Shredding	150.0	Tonnes	120.0	80%	120.0
Glass	Recycling	10.0	Tonnes	8.0	80%	8.0
Composites	Recycling	17.5	Tonnes	8.8	50%	8.8
Plant	Reconditioning	50.0	Tonnes	25.0	50%	25.0
Architectural Features	Reclamation	30.0	Tonnes	30.0	100%	30.0
Miscellaneous	Various	250.0	Tonnes	250.0	100%	250.0
Hazardous / Potential Contamination	Landfill	50.0	Tonnes	0.0	0%	0.0
Total		4,457.5	Tonnes	3,571.8		3,571.8

Thank You

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