















2nd TRIS Peer Review Report (Birmingham)



Introduction

1.0 What is a peer review visit?

Peer review visits are intended to be a practical and effective tool to foster learning between organisations. In the context of the TRIS project, the objective of a peer review visit is to enable organisations to improve their working knowledge of industrial symbiosis by learning from each other. The visits are intended to benefit all participants through an open exchange of ideas, knowledge, and sound practices. The host organisation should expect to gain as much from the experience as the visitors, if not more.

1.1 Steps to organise a peer review visit

- Make contact between the host and visiting organisation
- Identify potential areas for support or sharing
- The two organisations should identify which areas they want to learn about from each other. Possible areas include: leadership/management; strategic planning; project examples (good practices); funding/ governance arrangements
- Identify responsibilities in planning and carrying out a review visit

1.2 Organising the visit

During this step, it is very important that both organisations know what they are responsible for. The following is a starting point

1.2.i Host organisation

- Establish availability and identify tentative dates for the site visit. If possible, the visit should happen at a time when the visitors can observe your activities taking place.
- Determine who will participate in the review visit. Designate which staff will be responsible for receiving the visitors and taking them around.
- Make necessary logistical arrangements,
 e.g. set up meetings, arrange local transport, meals, etc.
- Inform key staff of the upcoming visit.
- Prepare and share an agenda for the visit.
 Don't forget to estimate and include travel times and distances between locations.
 Also consider including a wrap-up or closing activity.
- Prepare any other programme materials and share key documents and background information about your organisation with the visitors at least 2 weeks prior to their coming.
- Try to identify good ideas from your organisation that you think might be helpful to the visitors.
- Address the potential necessity of a translator – this will be dependent on the host organisation (language barriers may be more significant in some host organisations than others).

The host organisation will assess the need for translation.

Text adapted from http://www.tools4dev.org/resources/ how-toorganise-exchange-visits-among-local-organisations

















1.2.ii Visiting organisation(s)

- Determine who will participate in the review visit. People should agree to participate in the team only if they have a genuine desire to both offer and receive new ideas and to report back to others.
- Agree locally the number of visitors and how many people can come from the same company
- Review and give feedback on the proposed agenda.
- Notify the hosting organisation (with enough advance notice) of the names, arrival dates/times and other relevant information about arriving participants.
- Review the materials sent by the hosting organisation.
- Prepare to present/discuss your own organisation and programmes, as well as your successes and challenges.
- When you return home, share relevant information, approaches, skills, recommendations and ideas with those who did not participate.

1.2.iii All organisations

- Based on the needs of both organisations, identify focus areas for activities/discussion during the visit.
- Develop clear expectations about the visit, including:
 - o Issues to be discussed
 - o Type of activities to be carried out
 - meetings, focus group discussions, observation, site visits, etc.

- o Who will participate? Agree the organisations that should be involved: do we want people from the same sector? Should we weight some sectors more than others? Should it comprise a mix of stakeholders?
- o The programme duration/length
- o Financial responsibilities which organisation will pay for what?
- o Who will be responsible for follow-up and reporting?
- Maintain an open, supportive, friendly environment for discussions about programmes and organisational strengths and challenges, as well as past successes and lessons learnt.
- Provide complete, accurate and meaningful information and feedback to each other during the visit.
- Do not act in any way that can negatively affect the reputation of the other organisation during the visit.
- Monitor participants' reactions and comments during the visit. Notify each other of any issues or problems that arise. Communicate and cooperate fully and openly with each other in relation to the solution.
- Provide participants with a formal opportunity to comment on the programme immediately following participation.









1.3 Follow-up

When the visitors return home, it is time to reflect further on what each organisation has learned from the exchange experience. It is important to make an effort to share the information with your colleagues after the visit. Discuss what ideas have come out of the review visit and how you might go forward to adapt or enhance your organisation's programmes or systems.

1.4 What makes a peer review visit successful?

- Clear expectations for both the host and visiting organisations developed prior to the visit.
- A well-planned and well-implemented programme, including enough time to discuss what you have seen at the end of the day.
- A friendly and open atmosphere during the visit.
- People from both organisations actively taking part in the activities and discussions
- Not just sharing information, but a focus on trying to learn and identifying lessons and ideas to use and adapt after the review visit
- · Effective follow-up and reporting.

1.5 Prepare a report to donors on the peer review visit

Reporting is an important way to communicate with key stakeholders about the purpose and outcomes of your peer review visit. The following key questions should be answered in the report to share what both organisations have learned during the visit.

Include any additional information, insights or ideas of interest to you in the report. Length of these reports should not exceed five pages.

Peer Review Visit to Birmingham

Background information

1. Visit purpose and programme

The peer review visit purpose is to initiate a dialogue with the visiting delegation on numerous topics which play a role in stimulating industrial symbiosis practices.

A summary of the agenda is shown below for the two-day program on the 12th July and 13th July 2017: The complete agenda is attached to this report in the appendix.

- 1) Welcome and Introduction Why TRIS matter (Jackie Homan, Birmingham City Council)
- 2) The Regional Context (Adrian Cooper, West Midlands Technical Advisory Board)
- 3) Local case studies (Anna Bright Chief Executive, Sustainability West Midlands)
- **4)** Overview of the Waste Strategy and work related to industrial symbiosis in Birmingham (Jackie Homan, Birmingham City Council)
- **5)** Supporting Business through Industrial Symbiosis (Including an introduction to BASIS a new ERDF programme in the region (Ian Humpreys International Synergies Ltd)
- 6) Liveable Cities, iBuild, Urban Living (Prof Chris Rodgers, University of Birmingham)
- 7) Energy Capital-the context for innovation/renewables (**Prof Martin** Freer, University of Birmingham)
- 8) Severn Trent site visit, exploring conversion of food waste and sewage sludge to biomethane (site capacity 48,500 tonnes per anuum)
- 9) Suez site visit, showing how the Birmingham City Council process their mixed waste streams, paper, plastic, glass etc using a state of the art facility
- 10) Tyseley Energy Park visit and tour of biomass facility using the state of the art gasification unit (capacity 70,000 of wood/annum)



Figure 1 – Day 2 Peer Review Visit Severn Trent's Anaerobic Digester in Stourbridge.

Severn Trent Green Power operate two Anaerobic Digestion food recycling facilities in the West Midlands, located in Coleshill and Stourbridge, with a third site in Derby due to open in 2018. These state of the art food waste recycling centres receive food waste from local companies, local authorities and the waste service industry and convert it into clean, green renewable energy and a nutrient rich biofertiliser.

Each facility is permitted to recycle 48,500 tonnes of food waste per year and can process both packaged and loose food waste as well as bulk liquid wastes.

The Coleshill plant produces renewable electricity whilst the Stourbridge and soon to open Derby plants produce biomethane, which is injected onto the gas grid. Each plant produces enough renewable energy to power approx 4500 homes per year and (like other digestion processes) also produce a high quality biofertiliser for use on local farmland.

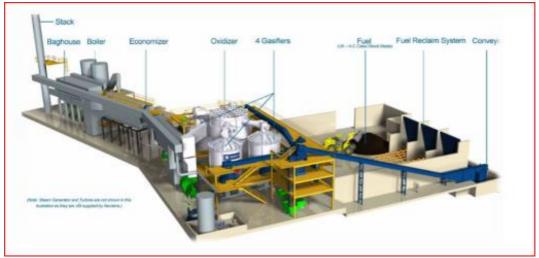


Figure 2 – Day 2 Peer Review Visit Tyseley Energy Park.

Tyseley Energy Park (TEP) is a 10-acre development site in central Birmingham. The site is owned by one of the oldest manufacturing firms in Birmingham – Webster & Horsfall Limited – who are aligning themselves with UK's dynamic renewables sector. This presents an exciting opportunity for companies from the green technologies sector looking to develop their business within a strategically important site that has not been on the open market for 165 years.

Tyseley Energy Park Phase 1 has already benefited from £47.8 million capital investment towards a state of-the-art Waste Wood Advanced Thermal Technology Biomass Power Station. This plant processes 72,000 tonnes of waste timber to produce 10.4MWe electricity. 9MW electricity is exported to the national grid and the balance is fed into Webster and Horsfall Ltd manufacturing operation. This first phase of development also saw the estate road upgraded, and the infrastructure for a heat main distribution network established which is capable of exporting low grade heat across the site if a suitable application can be found.

This Biomass Power Station reduces carbon footprint by 107,000 tonnes of Carbon Dioxide (CO2) per annum and provides 19 full time local jobs.

2. Participating organizations and delegates

The organizations involved were: Industrial Symbiosis Ltd, Valencian Institute of Business Competitiveness, Energy Agency for Southeast Sweden, and AIDIMME Institute of Technology. From the hosting organizations, senior staff was involved in illustrating the regional policy on waste and innovation, and stakeholders from the local stakeholder group were involved to present ongoing initiatives.

Visiting regions

Birmingham and Solihull

- 1. Jackie Homan, TRIS Project Co-Ordinator, Birmingham City Council
- 2. Adrian Murphy, TRIS Communication Director, Industrial Symbiosis Ltd
- 3. Adrian Cooper, West Midlands RTAB, IS regional team member
- 4. Anna Bright, Sustainability West Midlands IS regional team member
- 5. Ian Humphreys, International Synergies Ltd regional stakeholder
- 6. Prof Chris Rogers, University of Birmingham, IS regional team member
- 7. Prof Martin Freer, University of Birmingham, IS regional team member
- 8. Neil Liddell Young, Severn Trent, regional stakeholder
- 9. Ben Harding, Suez, regional stakeholder
- 10. David Horsfall, Webster and Horsfall, IS regional team member
- 11. Matthew Grubb ORA
- 12. Chris Bouch University of Birmingham
- 13. Paul James Suez

Emilia Romagna

- 1. Sara Picone Aster
- 2. Ugo Mencherini Aster
- 3. Pier Luigi Porta ENEA
- 4. Manuela Ratta Emilia-Romagna
- 5. Barbara Zanetti Emilia-Romagna
- 6. VLadimiro Cardenia University of Bologna

Valencian Community

- 1. Joan Pau Plaza Villanueva, AIDIMME (TRIS project partner)
- 2. Francisco Alvarez Molina, Valencian Community, Director General for Economy, Entrepreneurship and Cooperativism
- 3. Paco Ferrando, IVACE (TRIS project partner)
- 4. Anabel Pascual Regional Government of ValenciaAna Huntado AIDIMME

Hosting region

Birmingham and Solihull

Reflection on the visit

Follow up

The representatives from the both Spain and Sweden were particularly interested in the innovative research at the University of Birmingham on energy related topics; and in the two Energy facilities included in the site visits, the Severn Trent Anaerobic digester and also the biomass facility located in Tyseley.

All the delegates were interested in the BASIS project, a regional ESIF funded project where the Birmingham IS stakeholder has changed regional policy and the allocation of regional ESIF funds. This project started operating the region in semester 2. BASIS will create a unique cross-sector network across the LEP area comprising as a minimum, the 12 priority sectors identified in "Delivering Growth – Strategic Framework" for GBS LEP. BASIS will identify business opportunities between the sectors based on the uptake of resource efficiency measures and technologies using the proven methodology of industrial symbiosis/circular economy, as currently supported by the UK Government at G7/G20 and European Commission levels. BASIS will complement and assist existing GBSLEP ESIF programmes including the Business Growth Programme (BGP). BASIS will achieve high levels of Micro, Small and Medium Enterprise (MSME) engagement and reduce waste by keeping resources in productive use for longer.

To meet the programme objectives, BASIS will undertake the following activities: -

- Strategic direction brief Birmingham City Council lead the project and advise their delivery partner International Synergies Limited on the up to date regional priorities in thematic area 6f; Birmingham City Council also direct the interaction with other regional programmes and priorities to ensure maximum benefit.
- Engage micro, small and medium enterprises (MSMEs) in the project to form a network of companies managing resources
- Hold workshops to convene MSMEs, share best practice and identify opportunities to improve resource utilisation.
- Provide one to one support to the MSMEs to assess and advance opportunities
- Use of award-wining SYNERGie resource management software to provide data support
- Stimulate demand-led innovation by communicating business needs to the research and development community
- Measure impacts of actions
- Identify replication potential for resource utilisation solutions
- Use the waste hierarchy to communicate and assess impacts of resource utilization opportunities

The BASIS model relies on a facilitated industrial symbiosis programme which has proven time and time again to be a better option for resource efficiency than beginning with technical studies and data collection, such as through waste audits, or relying on passive participation such as through waste exchange databases.









Outline agenda for meeting in Birmingham

11th July 2017

Evening meal - venue to be confirmed

12th July 2017

Venue: International Synergies, Kings Norton (we will arrange collection by bus from a city centre location at 9am)

Time	Item	Lead
9.30	Arrival and refreshments	
9.45	Welcome and introduction – why TRIS matters	
10:00	The regional context	Adrian Cooper, West Midlands Resource Technical Advisory Board
10:20	Local case studies of waste management	Anna Bright, Chief Executive, Sustainability West Midlands
10.40	Overview of the waste strategy and work around industrial symbiosis in Birmingham	Jackie Homan, Birmingham City Council
11:00	Break	
12:15	Supporting business through industrial symbiosis (including an introduction to the BASIS project)	lan Humphreys, International Synergies
11:15	Liveable Cities, iBuild, Urban Living	Prof Chris Rogers, University of Birmingham
11:45	Energy Capital – the context for innovation/ renewables	Prof Martin Freer, University of Birmingham
12:45	Any questions, Discussion	
13:00	Lunch	
13:30	Transfer to Stourbridge/ Minworth	
14:00	Severn Trent organising a site visit and presentation. Exploring conversion of food waste and sewage sludge to biomethane and CHP.	Neil Liddell-Young, Renewables Strategy and Commercial Development Manager Severn Trent
16:30	Questions Round up.	
17:00	Coach back to Birmingham	

19:00 Evening meal – venue to be arranged.







13th July 2017

Venue: SUEZ Materials Recycling Facility and Tyseley Energy Park (we will arrange collection by bus from a city centre location at 8.45am)

Time	Item	Lead
9.00	Arrival at SUEZ and refreshments	
9.15	Welcome and introduction. Site visit and overview of the work that SUEZ UK are involved in	Ben Harding, Director of Corporate Sector Development SUEZ Recycling and Recovery UK
10:45	Transfer to Tyseley Energy Park	
11:00	Arrival	
11:30	Tyseley Energy Park and biomass plant. Tour and presentation.	David Horsfall, Webster and Horsfall
13:30	Lunch	
14:00	Transfer back to Birmingham city centre OR to airport.	