

**Birmingham Science City Innovative Low Carbon Working Group (ILCWG)
 Notes from 21 September 2017 meeting**

In attendance:

Name	Initials	Organisation
Alan Carr	AC	Birmingham Science City / Sustainability West Midlands
Alison Fulford	AF	National Grid
Andrew Todd	AT	University of Warwick
David Horsfall	DH	DACH Planning
Gareth Evans	GE	Sustainability West Midlands
George Constantinou	GC	Coventry University Enterprises Ltd
Jamal Lea	JL	Aston University
Leigh Ingram	LI	Innovation Birmingham / Climate KIC
Mark Smith	MS	Groundwork West Midlands
Mike Woollacott (Chair)	MW	Greenwatt Technology
Pam Waddell	PW	Birmingham Science City
Rob Mackenzie	RM	University of Birmingham
Sarah Watson	SW	Coventry City Council
Sean Farrell	SF	Staffordshire University
Steven Ogden	SO	Green Gain
Susan Lee	SL	University of Birmingham
Suzanne Curtis-Coles	SC	Energy Systems Catapult
Toby Terlet	TT	Veolia

1. Chair’s welcome and introductions

MW, Chair, opened the meeting and introductions were made. A comment was made on the diversity of group members in terms of their sectors and interests, as well as the reasons they attend and suggested this is one of the key factors in the ILCWG’s success.

2. Energy Systems Catapult (ESC) – current projects and opportunities

Please see accompanying slides for more information on ESC’s latest projects (to follow soon). A discussion followed the presentation, the key points from which were as follows:

- It was emphasised that ESC is a national organisation and that its location in Birmingham is a reflection of the region’s strengths on energy systems and storage.
- Overall, there is a will in the organisation to do more externally facing work and promotion and, as such, they are looking to start more conversations with different types of organisations. ESC is also open to being involved in several energy projects, e.g. through the recent ERDF calls (see item 4).
- There is a specific [SME support programme](#) available and any SME across the country can potentially access this support, the nature of which varies on a case-by-case basis depending on their individual challenges. ESC does not provide cash to SMEs but can provide advice and guidance on how to improve their accessibility to local and national markets (**ACTION – ILCWG members to get in touch or signpost individuals to ESC if there is potential for them to support them**).
- There is also the opportunity to form consortium groups involving ESC; the [Energy Technologies Institute](#) (ETI) fund some such groups already but these are not exclusive relationships.



- ESC is also keen to look at place based innovation; it is doing this by contributing to the [Energy Capital](#) Steering Group in the West Midlands and by supporting Greater Manchester with its priorities. It is also supporting the Midlands-run [Energy Research Accelerator](#). ESC is currently writing a Regional Engagement Strategy which will include the findings of the regional [Science and Innovation Audits](#) (SIAs) from across the UK.

3. BIFoR FACE project – leading climate change research

Please see [accompanying slides](#) for more information on the Birmingham Institute of Forest Research (BIFoR) Free-Air Carbon Dioxide Enrichment (FACE) programme (see [this website](#) for an overview of the experiment). A discussion followed the presentation, the key points from which were the following:

- The facility will run until 2026 and it is hoped that further funding will allow this to be extended.
- It was commented that both deciduous and coniferous trees can be effective in generating relevant results but in the experiment taking place in Staffordshire an oak woodland is being used as it is more natural and allows the team to answer the question ‘how does a landscape that has always been under trees react to CO₂ and other changes?’
- A discussion around woodchip took place and the presenter commented that it seems unlikely that more woodchip based supplies would be worse than fossil fuels.
- The experiment could also have implications for re-forestation and land management which is important given the ever-increasing competition for land.
- RM suggested that a future ILCWG meeting could be hosted at the BIFoR FACE facility and tours are also available which could focus on innovation (**ACTION – AC to follow up with RM**).
- RM mentioned that [Shaylor Group](#), a construction company, built the BIFoR facility’s headquarters and could be a useful organisation to connect with in light of region’s strength in sustainable construction (**ACTION – AC to follow up with RM**).

4. Current low carbon and innovation European funding opportunities

AC, with support from PW and other ILCWG members, gave an overview of the latest relevant European structural funding opportunities and logistics, the key points around which are:

- The latest low carbon (priority 4) European Regional Development Fund (ERDF) call in the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) area [is now open](#) and will close on 10 November. The LEP is calling for 94% of the remaining priority 4 allocation, which will be £1m for More Developed and £1.8m for Transitional (the former being the whole LEP area, the latter being East Staffordshire, Tamworth, Lichfield and Cannock Chase districts only) (**ACTION – get in touch with AC initially if you require any support in developing a potential priority 4 project in the GBSLEP area**).
- Other WM LEPs, including Coventry & Warwickshire, Black Country and Worcestershire, also have low carbon calls out now, with the same 10 November deadline. A full list of calls [can be found here](#).
- There is also a [research and innovation \(priority 1\) call open](#) in GBSLEP, inviting proposals for projects that predominately benefit the Transitional Area described above. Again, the deadline is 10 November (**ACTION – get in touch with PW initially if you have**





any potential projects that fit with this priority 1 call). A further priority 1 call, which is expected to open later in November, will open concurrently with calls in the Black Country and Coventry & Warwickshire LEP area with the aim of attracting cross-LEP projects addressing key aspects of the [WM SIA](#). A workshop is taking place on this cross-LEP call on 10 October – contact PW for details.

- A roadshow took place on 28 September for organisations wishing to apply for priority 1, 4 or 6 (environment and resource efficiency) ERDF funding in the GBSLEP area.
- The final priority 4 (and possibly, other) ERDF calls nationally are likely to be in summer next year.

AC, with support from delegates, also provided an overview of the new Sustainable Urban Development (SUD) fund call which opened on 5 September. *Please see [accompanying slides](#) for more information on the SUD and eligibility.* Key factors are:

- It only applies to the GBSLEP area.
- It is looking for projects that will benefit environmental mitigation within the HS2 proposed route.
- Eligible projects can contain elements that align to both priority 4 (low carbon) and 6 (environment) combined.
- Normal ERDF rules and regulations apply, such as required outputs and 50% grant funding.
- There will only be one call, open now until 30 March 2018. Projects will also be reviewed at two other points, namely 31 October and 31 January 2018.
- £11.6m is available in this call, split roughly two-thirds priority 4 and one-third priority 6.
- [Nathan Smallwood](#) from Birmingham City Council (the accountable body) is the main contact for any queries.
- [This webpage](#) provides full details of the call and eligibility.

Other European funding news as updated in the meeting included the following:

- The Department for Business, Energy and Industrial Strategy (BEIS) is currently undertaking a review of the success of the ERDF priority 4 low carbon programme. Local workshops are taking place and the findings will be brought together at a [national conference](#), being convened by Sustainability West Midlands (SWM) on 17 October. This conference will also showcase how LEPs, combined authorities and city regions are performing on climate change, low carbon and energy matters.
- The fear is that, due to a national underspend against priority 4, the government may feel that there is not enough appetite to use funding available to develop low carbon projects, whereas in reality the underspend is as a result of difficulties around accessing and managing ERDF programmes as well as the lack of flexibility and constantly changing priority 4 guidance. This needs to be made clear nationally, particularly when planning for funds post-Brexit.
- The current ERDF programme ends in 2020 but organisations may still be able to access EU funding in 2023 due to proposed extensions.
- It is possible that the [Shared Prosperity Fund](#) could become a national replacement for ERDF post-Brexit, but it is too early to state this for certain as yet.



5. Future of the ILCWG in the context of the WM Science and Innovation Audit (SIA)

PW provided an overview of the WM SIA and focused on the aspects relevant to low carbon and how this could inform the development of the ILCWG in future. *Please see [accompanying slides](#) for a summary.* Key points included the following:

- It was emphasised that this is an exciting time for place based innovation as it is high on the national agenda including the emerging Industrial Strategy. Locally, all LEPs recognised innovation as a driver and the [West Midlands Combined Authority](#) (WMCA) takes innovation seriously. The mayor is overseeing this devolution and we now have more control over our own budgets which could include innovation projects.
- The WM SIA also supports the ambitions around innovation and provides an evidence base reflecting the strengths in the WM. The SIA first round reports were backed by BEIS and initially there was an audit undertaken at [Midlands Engine level](#). The [WMCA version](#) outlined is complementary to this.
- Within the WMCA SIA there is a strong focus on low carbon; three of the four market strengths contain low carbon aspects, namely next generation transport, energy storage and systems and sustainable construction.

PW also outlined that, through the WMCA and supported by the LEPs, a new West Midlands Innovation Alliance (WMIA) is likely to be formed taking on roles that Birmingham Science City currently operates. **Please note that this has not been formally agreed yet and arrangements detailed below are only proposals at this stage.**

There is likely to be a WMIA Steering Group which will report to the WMCA SEP Board and a primary aim will be to address issues raised in the WM SIA. The Steering Group would likely contain a cross-sector of key organisations and individuals that have particular strengths in priorities aligned to the WM SIA, including universities, science parks and businesses. It is envisaged that operating under the WMIA Steering Group will be continuing partner activity and groups that feed into the WMIA Steering Group and the SEP Board; this would most likely include the ILCWG or an equivalent set of working groups that address the key aspects of the SIA. It is emphasised that these groups would belong to the wider innovation ecosystem and not the WMCA specifically. This would give the ILCWG or equivalent groups a more powerful voice and opportunity to receive an endorsement from the WMIA Steering Group and SEP Board when developing collaborative projects. Projects that come from members of the ILCWG or equivalent could hopefully be catalysed quicker and more efficiently. It was emphasised that this new model **is still in development** but could provide an opportunity for ILCWG members.

Following this introduction, the Chair opened up a discussion that asked for ILCWG member opinions on this model and how the ILCWG could progress going forward. Key points were as follows:

- It is possible that under this new model, SEP Board or WMIA members could attend the feeder groups (i.e. the ILCWG or equivalent) to establish an even more direct hook from project activity to endorsement/approval. There is also likely to also be some executive support that will help the feeder groups, which will also provide some continuity.
- In terms of whether the ILCWG or equivalent should become a more influencing body, the general consensus around the table was that it should. Promoting closer work



between members of the group (for example links between universities) would allow it to become a much stronger collective voice.

- Collaboration currently happens on a fairly ad-hoc basis and therefore a project pipeline could be developed that is purely a collaborative one, rather than containing projects being run by one organisation that is not looking for partner involvement. This idea is more feasible in the proposed new model given that collaborative projects could be fast-tracked to the SEP Board for early recognition. It was emphasised that it is envisaged that the new WMIA Steering Group could be able to endorse projects that required national funding.
- The current project pipeline, along with being more collaborative, could also be developed to align more closely with the priorities that address the WM SIA, along with the WMCA and its [Strategic Economic Plan](#).
- It was commented that we cannot do things that are not aligned and that when collaborating, organisations have to show where each of their aims contribute to mutual agendas; is there space and reasonable capacity for more combined projects? It is perhaps better to look at project demand first before considering collaborative opportunities.
- PW emphasised that there is a lot happening all at once – innovation and low carbon/environment are just two aspects currently being developed within the WMCA's structures; there are many more, so it will take time for this idea to form. Several other Boards are currently being proposed, some of which interact with the innovation agenda, such as a Digital Board.
- The Chair asked relevant organisations present about the view from the business sector. Overall it was commented that this sector is weaker at sharing information and they value the opportunity of groups such as the ILCWG to become involved in projects. The potential new conduit to developing these is important. The ILCWG is also seen as fairly unique and would therefore be a wasted opportunity not to be capitalised upon.
- Commercialisation in the market is also very important and by increasing collaborative opportunities and offering greater flexibility and innovation opportunities, this will reduce the likelihood of risk aversion which is often where businesses have issues. There would certainly be additional value of collaboration and it was commented by a few delegates that speaking to more people and gaining more intelligence on what is going on and new funding opportunities would be hugely beneficial. The idea is to create new project ideas and then identify the funding source, rather than the other way around.
- It would also be useful if there was a reference point that outlined what each member of the ILCWG specialised in and what their main areas of focus are, e.g. in the form of a mini profile, so as to better understand people's specialisms and expertise (**ACTION – AC to investigate**).
- *We would welcome ILCWG member comments, ideas and suggestions on the new model and anything else relevant to this discussion; please contact AC initially (**ACTION – all members to circulate any thoughts**).*

6. New partnerships and funding opportunities

A reminder to ILCWG members that there is a pipeline of projects that sits alongside this group that AC manages (**ACTION – all members to contribute when appropriate**).

A roundtable update was convened:





- GE commented on the benefit that groups like this can have on students developing in the low carbon sector and welcomed the opportunity to attend.
- LI works for Innovation Birmingham and is part of the [Climate-KIC](#) team and emphasised that she would welcome organisations coming to them with ideas and projects focusing on low carbon innovation; they are a useful source of support to access (**ACTION – ILCWG members to note and contact LI for support**).
- JL outlined an ERDF funded [low carbon business support programme](#) being run by Aston University for SMEs in the GBSLEP area. Free energy diagnostics are offered which take up to two to five days and the SMEs are able to obtain support from academics. Some SMEs can then obtain grant funding of up to £12.5k. The main focus is on businesses operating in the manufacturing and process sector. The University is also looking to establish longer-term academic collaborations with ten SMEs with the view to producing journal articles to help inform future projects. The scheme runs until February 2020.
- AF outlined that she works within the construction section of National Grid and could therefore offer (1) a way in to the construction industry in light of SIA findings and (2) to host future meetings and site visits for the ILCWG (**ACTION – AC to follow up with AF**).
- SO provided an overview of [Green Gain](#), an environmental consultancy that specialises in the circular economy and waste and resource management. Their recent projects involve reducing waste especially in the hospitality sector, waste valorisation and providing advice on food waste production.
- SW outlined that the new [Green Business Network](#) in Coventry and Warwickshire has now been launched. This is part of their ERDF programme and is for SMEs in the C&W LEP area. There will also be events for SMEs to attend to help showcase what support is available to them, as well as an annual survey that will ask what support SMEs need. This will also look at resource efficiency as well as low carbon. There is potential that this could be extended into a cross-LEP initiative.
- SL provided an overview of the [Transforming Birmingham](#) programme, an ESC and EPSRC funded project that asks how different sectors can be pulled together across the city, including transport, energy and waste to develop a whole systems approach. This could potentially be a presentation at a future ILCWG meeting (**ACTION – AC to follow up**).
- SF outlined that there are new district heating networks being installed in Stoke; drilling will commence in the next couple of weeks. Partners are sought for new technologies as well as advice around policy, culture and regulation (**ACTION – ILCWG members to contact SF with offers of advice/support**).
- SF also showcased a new innovative prototype that helps to prevent pollution by taking out all particulate gas from a specific location very quickly and efficiently. The turbine is powered by solar PV. The University is looking for demonstration areas to test and trial the technology (**ACTION – ILCWG members to get in touch with offers of support and suitable low air quality areas to test the technology**).
- MS/AC promoted the [Low Carbon Growth Support Project](#), led by Groundwork West Midlands and supported by SWM. It supports SMEs in GBS and Black Country LEPs with a free energy efficiency audit and grants towards energy efficient equipment and specialist consultancy. Please signpost to any SMEs in the relevant geography (**ACTION for all members to support**).





- AT mentioned that University of Warwick has had success with the [Climate-KIC Pioneers in Practice](#) programme and pioneers from the scheme have recently supported their energy management practices on their estate.
- The University also has a global sustainable development degree which is now in its second year; they are looking for local connections (**ACTION – ILCWG members to let AT know if anyone has any interest in supporting this degree**).
- There are a couple of relevant public lectures coming up which may be of interest to ILCWG members (**ACTION – AT to send details for AC for circulation**).
- DH provided an overview of a zero carbon refuelling station that includes hydrogen and biogas which has just obtained planning consent and is about to go out for procurement. There are six rapid chargers and twenty electric taxis already set up (**ACTION – potential future presentation; AC to liaise with DH accordingly**).
- GC gave a summary of two upcoming events: (1) a [workshop on Passivhaus](#) taking place on 26 and 27 October in Coventry and (2) [Innovate 2017](#) on 8 and 9 November, Innovate UK's national showcase event taking place in Birmingham which will include seminars focusing on issues such as the [Industrial Strategy Challenge Fund](#) and one-to-one brokerage support for businesses.
- MW promoted [Greenwatt Technology's](#) recent electric vehicle review undertaken for Warwickshire County Council which involves analysing provision in both tier one and two councils. There is a strategy going to cabinet and the project has informed the Warwickshire Leading the Charge programme.
- Greenwatt is also looking at off-road vehicle to grid capacity, especially relevant in rural areas of the region.
- There is also a bid going into the open Coventry and Warwickshire LEP ERDF Priority 4 call to support the [National Low Carbon Centre](#) at Stoneleigh.

7. Date of future meeting

Wednesday 6 December 2017, 14:00 – 17:00 (timings may change)

