David McDonnell*

Smart ECO Hub – Building cross border relationships in the energy sector

1. Introduction & background

The Smart ECO Hub was a cross border cluster organisation for businesses involved in the energy sector in the North East of Ireland. Its territory encompassed 15 local authority districts - 12 in Northern Ireland (NI) and 3 in the Republic of Ireland (RoI) along a corridor spanning from the greater Belfast metropolitan area to the border of County Dublin. This territory has a population of 1,498,908 which represents approximately 24% of the total population of Ireland. Ireland (RoI & NI) has approximately 256k active businesses (189k in RoI and 67k in NI): 99% of all these are SME’s. There are ~50k active businesses in the Smart ECO Hub territory\(^1\). The remit of the Smart ECO Hub was to drive economic growth and job creation on both sides of the border through fostering business to business collaboration and innovation with a focus on sustainable energy and low carbon technologies. Ireland has a very high dependency on imported fossil fuels with over 87% of households directly dependant on imported fossil fuels for space heating\(^2\). The cluster was funded as a three year project under the INTERREG IVA programme.

* Project Manager, Smart ECO Hub
The funding for Smart ECO Hub was secured by East Border Region Ltd (EBR), a local authority led organisation governed by 10 local authorities (7 in NI and 3 in RoI). EBR were encouraged to develop a proposal in the Low Carbon/Sustainable Energy arena by Louth County Council (LCC), one of the governing local authorities which had direct experience of promoting various community based energy efficiency projects funded under EU schemes.

Louth recognised the commercial dividend that could benefit local businesses by participating in the low carbon/sustainable energy arena by reducing their own energy related costs and also by creating additional market opportunities through providing products or services that contribute to energy efficiency and a low carbon economy. As part of their own research they benchmarked ECO World Styria which is a very successful Cleantech cluster based in the state of Styria, southeast Austria. One of ECO World Styria’s critical success factors was seen to be the effective collaboration between the regions businesses, local government and 3rd level academic institutions – the triple helix.
1.1 Terms of Reference

It is recognised internationally that clustering and innovation are intrinsically linked and in turn drive economic activity\(^3\). It was considered that the EBR area would also benefit from a similar cluster but in order to attain sufficient critical mass, the COMET group of councils were also enrolled into the project region – this brought Belfast City and four associated metropolitan area councils into the project scope. Additionally as part of the triple helix model, the six regional 3\(^{rd}\) level institutes were also invited to participate. EBR also commissioned an extensive economic appraisal which formed the research for an eventual application for the INTERREG IVA funding under its Priority 1 Axis: Co-operation for a More Prosperous Cross Border Region; Theme 1 Enterprise – Business Networking. This application was ultimately successful and the project was authorised for a 3 year period with total funding amounting to \(~€970k\). The terms of reference included providing businesses with additional support and signposting in the areas of Innovation; Know-how; Marketing and Exports. Project specific objectives and targets were defined by the funders in a document called the Letter of Offer (LoO).

1.2 Organisation

EBR then formed a partnership agreement with LCC that resulted in LCC hosting the project. This meant that LCC took ownership for project staff hiring, resourcing and general oversight. In practical terms this meant that LLC funded the project on a day to day basis subject to being reimbursed for the project specific expenditure. In addition, the terms of funding also mandated that a project steering committee must be formed comprising of all the project partners – 21 in all. The steering committee initially met monthly to overview progress. Over the lifetime of the project the composition of the steering committee proved to be less than ideal. It is assumed that the rationale of the funders to mandate a large committee was to ensure the commitment and participation of all the stakeholders in the successful implementation of the project. However in practical terms this resulted in a number of negatives: agreeing meeting dates for a large group is challenging; attendance was inconsistent making continuity difficult; organisational changes also impacted continuity over the project lifetime; committee nominees did not necessarily have domain expertise or sufficient influence within their own organisations to drive engagement. The steering committee composition was also seriously flawed in that it had no industry representation – one third of the helix was missing from the policy & strategy setting mechanism.
The funding provided for the hiring of four full time staff: a Network (Project) Manager, Technical Manager, Marketing Executive and Finance Administrator. The Network Manager had overall responsibility for the delivery of the project: working with the Steering Committee to set and implement strategy; translating this into tactical direction and operational plans covering business development and marketing of the cluster as well the delivery of the project specific objectives and targets. The duties of the Technical Manager was to assess the competencies of the participating companies and to provide technical guidance and advice in relation to technologies as well as brokering alliances between companies, development agencies, third level research institutes and funding sources as required. The Marketing Executive coordinated the development of all the marketing collateral and managed communications to ensure a high profile for the project and its outcomes. This also involved developing and executing an extensive calendar of events designed to aid recruitment and deliver knowledge in support of the project objectives. The Finance Administrator tracked all aspects of the project expenditure and ensured they were processed in line with LCC financial governance polices who issued the payments in the first instance. The administrator also prepared the claims for submission to SEUPB via EBR (as the lead partner) to reimburse LCC. This proved to be quite onerous due to both the volume of activities (driven by the project set-up and marketing activities) and because both LCC and SEUPB have their own distinct and separate accounting systems and procedures.

As the project was centred on working with businesses, the job descriptions for the above roles all called for individuals with significant relevant industry experience as well as the appropriate domain skills.

2. Cluster Development

The funding period commenced in March 2012 from a standing start and it was August of 2012 before the first project staff member (the Network Manager) commenced employment and the project could be regarded has having started in a practical sense. The Marketing Executive joined in September 2012 and the Technical Manager in January 2013. During the first couple of months much of the focus was on putting in place the project infrastructure. Additionally, work was done on the project identity, branding and marketing messaging to allow the website to be developed.

A project launch event was conducted in October 2012 which attracted a good audience. The initial focus of the project was recruiting companies that were active in product development and market expansion. However, this represented a limited pool of candidate members which soon became exhausted.
and member recruitment began to stall. Additionally, although the project was fully funded, the funders mandated that a €200 membership should be charged in order to validate the applicant’s commitment to actively participating. While this would appear to be a nominal and justifiable fee, the lack of a clearly articulated value proposition statement for the activities of the Smart ECO Hub at that time made it difficult to justify for many of the candidate businesses; this was further compounded by the fact that they were mainly SME’s or micro SME’s with limited resources.

The project then entered a very difficult phase where progress fell behind plan: the project team came under significant pressure as the lack of progress threatened the project funding; the team itself lacked cohesion as it was only newly formed; the structure of the steering committee limited its capability to provide coherent guidance & direction. The situation further deteriorated when the Network Manager resigned in March 2013, necessitating the Chair of the Steering Group and the LCC supervising Director having to take a more hands on role in the routine operations of the project in order to avoid funding being withdrawn due to the lack of progress. While this intervention undoubtedly saved the project, progress was still slow due to the understaffing and the unclear direction of the project. The situation finally began to turn around in August 2013 when a new Network Manager and a full time Finance Administrator finally joined the project. At this time, the team recognised that the project scope and direction was still somewhat confused even from their own perspective: the target market was unclear and the value proposition of the Smart ECO Hub was not well defined. The team took time to collectively reconsider the business sector(s) the Smart ECO Hub should target and to clearly define the value offering of its membership.

The project was originally intended to focus on building a low carbon business network. By definition, “Low Carbon” tends to focus on low energy / low CO$_2$ emissions and so this would suggest that activities should tend to focus on reducing the member business’ energy consumption and CO$_2$ emissions. But this was not in alignment with the objectives and targets that had been set for the project by the funders. The project had also been modelled on ECO World Styria which largely serves a broader base of ‘Cleantech’ industries. There is no agreed standard definition of Cleantech and it encompasses many different sectors of activity including energy, water, waste and other sectors. This wide span of industrial sectors creates its own challenge in terms of the diversity of companies, technologies, regulations and the ability of a team of three to develop sufficient competency and credibility to enable them to build a dynamic network of scale across these diverse sectors over the remaining two years of the project. The team therefore decided to focus on businesses that were involved primarily in the energy arena as providers of products or...
services. This facilitated a more selective market focus which still encapsulated many different but related areas of activity and allowed the team to leverage the strength of their own industry experience.

With the industry sectors now better defined the team then considered the ideal profile of a member: the project had distinct targets in terms of collaborative developments so clearly those businesses that were already known to be active in product development would be key targets. However from profiling the database of companies that the project team had built up to-date it was evident that this would not provide a sufficient pool of existing innovating candidate members (IP Owners) to achieve the target membership. The team decided that a wider target membership should include known Innovators and also Facilitators – companies that form part of the vertical ecosystem that provides the infrastructure for the innovators to successfully operate. In this context this would include not just companies involved directly in the supply chain but also ancillary services such as service operators; installers; designers; consultants (legal, business & technical) and related technology suppliers.
The team considered that the facilitators were also potential sources of innovation as many were directly involved in the deployment of the product or service with customers and were ideally placed to identify improvement (or innovation) and/or new business opportunities. By improving the linkages between these various actors the probability of germinating new innovative ideas increased.

2.1 Business recruitment

Now that the target market was better defined the team refocused on recruiting companies into the cluster. The team initially used two primary vehicles for recruitment: Events and 1-2-1 meetings. While the team had grown a database of potential companies to target for enrolment they recognised that this was incomplete as there were likely to be other good candidate companies in the region of which they were not aware. A busy schedule of events was developed across the region: themes were chosen that would appeal to businesses – topics that highlighted business opportunities or information on the regulatory environment that would be likely to impact them and each event also provided a networking opportunity for the attendees during breaks. An overview of the
Smart ECO Hub was always provided and attendees were encouraged to talk to the team members present to discuss potential membership. Locations were chosen that had good access to maximise attendance. For some less accessible area’s the Smart ECO Hub leveraged events organised by others to get its message to those local businesses.

In addition to the events, the project staff arranged 1-2-1 meetings with companies as the opportunity arose. This was an important activity that allowed the project staff to get a more intimate understanding of the business: what is the core business; what are the strengths and weaknesses; and what are the future priorities? During the 1-2-1 meetings the team would also highlight the advantages of membership of the Smart ECO Hub.

Over a period of approximately 8 months the membership tripled to approximately 90 members. This was due in part to the hard work of the project team coupled with the momentum that a growing organisation carries: the virtues of a network of 90 companies are easier to sell than one of less than 30; companies tend to ‘sit on the fence’ in the early stages of recruitment until they perceive the size of the cluster as being evidence of its intrinsic value. Notwithstanding this success, not every target company joined the Smart ECO Hub and this was due in part to the existence of other, sometimes overlapping projects and clusters which ‘muddy the water’. Due to its troubled past, the Northern Ireland region in particular is a beneficiary of many supports intended to foster communications and economic growth. Thus there are many programmes which are well intentioned but due to poor coordination they can overlap rather than complement each other and so end up effectively competing for participating companies, especially SME’s who have limited management bandwidth and financial resources to invest in multiple networks. This is particularly acute for Start-ups who are invariably cash negative and operating with shallow, finite reserves. In other cases it was due to doubts as to the benefits of membership or due to previous negative experience by businesses of existing ‘state’ (and by extension EU) enterprise supports which are viewed by some as excessively bureaucratic, narrowly focussed or elitist.

2.2 Fostering collaboration, growth & innovation:

While Innovation was at the centre of the Smart ECO Hub project metrics, the team recognised that innovation does not occur on demand and that collaboration was ultimately the cornerstone for the success of the project. Additionally, innovation is still narrowly interpreted by many people as being the development of new products or services which precludes other valid activities that can have a greater impact on the performance of a business such as investments in training, information technology or process reengineering. The Smart ECO Hub
focussed on the American Innovation Network concise definition of Innovation – “Implementing new idea’s that create value” to ensure that companies do not solely regard innovation as being the roll-out of new products or services to their customers but also look at internal process change that can enhance their business operations. This definition of innovation is also consistent with the Oslo Manual\(^4\). As a result the team promoted the following definitions in its presentation materials to underline its broad approach:

Collaboration: “Something created by working jointly with another or others” - Oxford Dictionary

Innovation: “Implementing new ideas that create value” - Innovation Network (USA)

On an objective level the success or otherwise of the project was to be assessed as the measure of actual new product or related R&D project collaborations versus the arbitrary goals set for the project. In reality this is an unrealistic basis for assessment for a number of reasons:

- Innovation is more spontaneous than engineered: Large successful companies like Google and IBM, frequently rely on acquisitions to expand their product range, despite possessing extensive internal R&D capabilities which although excellent at commercialising an idea, rarely produce a truly innovative idea that leads to new market creation despite their size and investment.

- Innovation is typically a high risk activity which normally requires a considerable investment in resources (financial, technical and management bandwidth) with no guarantee of market success. Consequently, product (or service) innovation is something that companies and particularly SME’s are often reluctant to engage in unless there is: (a) a clear market opportunity; (b) a belief that they (the SME) can realistically compete in that sector; (c) the company has access to sufficient resources to develop and launch the idea.

- While innovation is often conceived in a collaborative environment, it is often fertilised and gestated within a single organisation until such time as that organisation identifies the need to bring on board partners to continue its development.

- Collaboration is built upon relationships which are anchored on trust. Both these factors take time and multiple interactions to form and solidify although the process can be accelerated through the matchmaking and networking opportunities afforded by membership of the cluster.

- Even when the product or service innovation development is kept in-house, the lead time from idea conception to market launch is in often in excess of
12 months - even within larger, more mature and well-resourced organisations. When projects are dependent on the future involvement of third parties, whether these are development partners, planning or regulatory authorities or enterprise support agencies, the inevitable additional bureaucracy can extend the project lead-time several-fold and also increases the risk of downstream project delays or failure.

Projects that have been nurtured by the Smart ECO Hub and which appeared to be good candidates for accessing the next level of support from enterprise agencies or other state supports were not guaranteed that this would be forthcoming: the projects or the business may not meet their acceptance criteria; there may still be a resourcing gap which the company cannot bridge or simply because they miss the programme cut-off date or the available funding may already have been committed.

The above underlines the challenges of achieving and evaluating the project objectives within a 3 year window. The Smart ECO Hub therefore focused on nurturing the member company’s commercial activities with an emphasis on developing new relationships between the various member companies in the cluster in the belief that through regular interaction they (the companies) would also identify synergies and emerging collaborative opportunities which in time, may also give rise to product or service innovation. This was delivered through activities such as the bespoke B2B matchmaking; creating showcase event opportunities for the members and the signposting of specific funding and business opportunities. The definition of the cluster and the resulting diversity of the membership are critical success factors in this regard. Too narrow a focus constrains the size of the membership and potentially results in high degree of uniformity in the members which is more likely to impede collaboration due to competitive jealousies. Conversely, too broad a definition results in members with virtually nothing in common which again impedes collaboration. In this regard the Smart ECO Hub focus on the (Sustainable) Energy sector has been highly successful, creating a vibrant and diverse business eco-system where the members have a common sphere of activity but with a broad range of business activities.

The Smart ECO Hub provides them with a valued alternative of practical advice and hands on-support through the project team as well as access to the expertise across the membership or even some limited external consultancy brokered by the Smart ECO Hub. The fact that the cluster also contains larger, more established organisations is also regarded as a benefit to the SME’s and start-ups for both their expertise and wider network which they may be able to leverage and they provide close to market opportunities. Similarly the larger
companies value the access to smaller business because of their innovative offerings and/or business agility.

2.3 **Collaboration with other agencies:**

The enterprise support structure in the region is complicated by the border which creates a duplication of agencies which also have a differing focus and terms of reference. Invest NI is the government funded Enterprise support agency for all businesses in Northern Ireland while Enterprise Ireland is the equivalent in the south but only for Irish owned or based businesses. InterTrade Ireland is an agency funded by both the Irish and UK governments to encourage businesses on one side of the border to trade on the other side. The high level objective for these three agencies is primarily to assist companies in growing export markets and thereby creating jobs.

Each county in the Republic of Ireland also has a Local Enterprise Office overseen by the local authority and financed by Enterprise Ireland. Their remit is to assist start-up’s so that they can grow and may ultimately become Enterprise Ireland clients. The Northern Ireland Enterprise Agencies have a similar objective but are generally independent, not for profit organisations and so are more constrained in the practical support they can offer. Beyond this there is a plethora of organisations aimed at supporting business development and innovation. Some of these are business or industry associations; others are funded for a fixed period by the government enterprise agencies or schemes such as INTERREG – the Smart ECO Hub falls into this latter category.

Despite much hype from the government supported development agencies about easy accessibility and the wide range of available supports, the majority of start-up’s and SME’s have a negative experience engaging with them. Typically, this is due in part to the bureaucracy associated with making an application and the reality that these enterprise agencies have to be selective in the types of projects they support in an effort to optimise their own funding. Often this translates into a reluctance to provide any substantive support unless there is export potential and it can be classified within a defined ‘high growth’ market category. While their desire is to kick-start the next Apple, Google or Pfizer is understandable, the reality is that the majority of employment and a significant proportion of GDP is created by mundane businesses who can only look on with envy at the support that is provided to selected start-up’s which promise to revolutionise or create new industries. Regrettably, in the vast majority of cases these new ventures ultimately fail or become just niche players. In 2013, 81% of employment in the Republic of Ireland was provided by non- Enterprise Ireland or IDA Ireland backed companies⁵.

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⁵ Source: [Report](https://doi.org/10.5771/9783845265889-230)
Outside of the state backed enterprise agencies there are limited actual support options for start-up’s and SME’s: their local chamber of commerce is also self-funded and while they endeavour to provide useful information to their members this is often constrained by their own funding and their localised focus. Industry organisations are often populated with competitors and so consequently gravitate towards the common theme of lobbying for industry wide issues rather than the bespoke needs of the members. Additionally, the restricted nature of the membership generally necessitates a high membership fee in order to fund itself and this in turn becomes a barrier for SME’s to join.

The Smart ECO Hub has endeavoured to work with the various agencies and other complementary organisations that also operate in its space but realistically the level of real engagement to date has been limited. This is mainly a reflection of the realities of the project lifecycle: initially much of the focus (and project lifespan) is spent on building the membership to reach critical mass which in turn builds the credibility for the cluster itself among other organisations; most other ‘temporary’ organisations have similar distractions which detracts their attention from collaborations; the state supported enterprise agen-
cies have the luxury of a longer term view but can be slow to engage due to a combination of factors: the diversity of the independent projects arising on an ongoing basis; some internal organisational myopia; and some reluctance to significantly invest in what will inevitably be a finite term relationship due to the limited duration of the project.

3. Project Results

Allowing for the time taken to get Hub established and a difficult early phase, most of the activity of the Smart ECO Hub occurred over the last 24 months of the project. The team can be justifiably proud of their accomplishments over this limited window of time as summarised in some of the project metrics: More importantly from the project evaluation survey undertaken at the end of the project, we now know that so far member companies have created 17 extra jobs, received over €300k in funding and increased revenues by over €848k which they have attributed to participation in the Smart ECO Hub and its activities. We also know that many more deals are still in negotiation so these figures will continue to rise.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Result</th>
<th>Goal</th>
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<tbody>
<tr>
<td>Membership (NI &amp; RoI)</td>
<td>101 (63 &amp; 38)</td>
<td>100</td>
</tr>
<tr>
<td>Members receive research, information and advice on new businesses opportunities</td>
<td>797</td>
<td>100</td>
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<tr>
<td>Significant market and collaborative opportunities identified or showcased</td>
<td>163</td>
<td>75</td>
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<tr>
<td>Projects Initiated</td>
<td>20</td>
<td>20</td>
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<tr>
<td>Newsletter &amp; Magazine (incl. R&amp;D Trends)</td>
<td>2 x Magazine editions 11 x Email Newsletters 2 x Guides published</td>
<td>2 Editions</td>
</tr>
<tr>
<td>International Best Practice visits</td>
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<td>3</td>
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<tr>
<td>Site Visits</td>
<td>9</td>
<td>12</td>
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<tr>
<td>Workshops, seminars &amp; other events</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Businesses attending workshops, seminars and other events</td>
<td>+944 (total attendees) 356 (unique organisations)</td>
<td>100</td>
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Additionally a number of short member interviews are also available on YouTube along with video highlights of some of the major conferences that Smart ECO Hub arranged in order to drive debate and provide showcase platforms for our members to demonstrate their expertise (search for “Smart ECO Hub”).

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Das Erstellen und Weitergeben von Kopien dieses PDFs ist nicht zulässig.
More importantly, for the majority of the participating member companies the Smart ECO Hub has established itself as a valued business support network providing a pivotal and complementary role alongside other state supported enterprise agencies. This is because many of the businesses do not qualify for support from the enterprise agencies due to a variety of eligibility criteria (or occasionally due to disdain by the business owner). Even for those companies which have an innovative idea the supports available from the state supported enterprise agencies are often only applicable when an innovation journey has commenced i.e. an idea has been generated and basic feasibility has been proven. This tends to exclude many start-ups and Micro SME’s which constitute +99% of the business community. The Smart ECO Hub by contrast provides a nurturing ecosystem for idea fertilisation through the provision of a vibrant network of companies which have a common interest (i.e. energy) and a diverse customer base so that competitive jealousies do not encumber open communications. In addition, the proactive networking and matchmaking of the cluster managers (the Smart ECO Hub team) helps identify, encourage and accelerate potential synergies between participating members. The member ecosystem provides a broad spectrum of experience which can be drawn upon due to both the varying sizes of the member organisations and the different stages of the product and organisational lifecycles which they find themselves.

Crucially, the cluster also provides a cost effective (from the SME’s perspective) safety net for businesses which for a variety of reasons may not qualify for support from the state enterprise agencies. The experience of the Smart ECO Hub has been that this soft support is invaluable in encouraging companies to persist in their efforts to broaden their commercial activities and commence engagement (or re-engage) with other agencies in order to progress to higher order supports that are ultimately valuable in lifting their business to the next level. Despite the publicity and hype from both Third Level Institutes and Enterprise Agencies about their accessibility and supports for new and existing entrepreneurs, the majority of our members (SME’s and even larger businesses) would cite difficulties engaging with them. To be fair to those organisations once the relationship is firmly established the feedback is normally more positive but the reality is that many businesses are reluctant to engage based on previous experience or the anecdotal evidence from other businesses. The Smart ECO Hub has demonstrated that it can overcome this reluctance through its proactive matching, coaching and direct support to ensure that these initial barriers whether real or perceived, are overcome.
4. Evolution

It is clear that the Smart ECO Hub provided a valuable service to the member businesses who wish to see it continue beyond the current funding period. As with any organisation, change is both a reality and a necessity in order to maintain its future relevance. Logical evolution of the Smart ECO Hub remit would potentially include increasing its geographic spread to incorporate all of Northern Ireland and the adjoining border counties in the Republic of Ireland: it already encapsulates the majority of this region’s economic centres and the districts not already participating do not have the critical mass to form a viable alternative cluster. Extending the focus beyond the energy sector is another logical progression so that in time it would encapsulate the various industrial sections normally associated with Cleantech. This would be grown organically based on interest from prospective members and allow the Smart ECO Hub team to grow their knowledge and competency to support these new sectors.

LCC provided a leadership role in the project inception and its delivery and it would be hoped that it would continue to play a significant role in the future. However large urban centres are a magnet for businesses and associated economic activity and in this regard Belfast city should play a more prominent role in the governance of the Smart ECO Hub due to its leadership position as the largest economic centre in the region. Working in tandem with LCC would ensure that cross border collaboration remains a key attribute of the Smart ECO Hub.

The Smart ECO Hub would also benefit from a change in the governance structure. The involvement of so many local authorities and third level institutes as stakeholders is a core asset but not effective from a governance perspective due to its unwieldy size and lack of influential participants. Additionally, the Smart ECO Hub has no corporate identity: it exists as a temporary section within LCC with no legal status. While this arrangement worked well in respect of the day to day operational funding from the council, it also precluded the Smart ECO Hub entering into contracts in its own right or on behalf of other stakeholders due to both its legal status and the necessity to comply with Republic of Ireland local government policies. At a practical level this limited options in respect of attracting certain funding streams as well as imposing constraints that are not relevant outside of a local government context. Such a change would provide Smart ECO Hub with greater flexibility and agility to fully explore alternative funding streams.

Establishing the Smart ECO Hub as a non profit, limited company would provide a greater degree of independence; the existing stakeholders could form the membership with additional representation from industry. They would elect
a number of non-Executive Directors from among their organisations to oversee the ongoing direction and operation of the Smart ECO Hub.

5. Lessons Learned

With the benefit of experience and hindsight, we would advocate that careful consideration and definition of the terms of reference for the cluster activity are fundamental to its success. While these may appear self-evident on reading, it is easy to overlook or underestimate aspects when developing a proposal. In this context we recommend the following aspects to be carefully considered:

5.1 Geographic scope: The target area needs to be large enough to have sufficient potential candidate businesses without assuming a very high success rate in recruitment or little churn: over time members will likely come and go for a variety of reasons. The area must also be manageable in size in terms of the project team reach and the ability of the members to come together on occasion. It should include at least one significant urban centre to provide a focal point for certain activities.

5.2 Industry Scope: Like geography, the selection of target industries must be broad enough to provide a reasonable pool of candidate members. Diversity is also an important factor to achieve a balance of companies that have sufficient synergies to facilitate collaboration but are not so homogenous that competitive jealousy will hinder cooperation.

5.3 Cluster Focus: Innovation is correctly viewed as fundamental for continued economic growth and success but it is an outcome of activities rather than a starting point. Innovation does not happen on demand and setting associated targets is ultimately more aspirational than practical unless it is to be measured over the long term. The cluster should provide a fertile environment for ideation and incubation: businesses need insights into immediate opportunities as well as emerging business and technology trends; a dynamic network to provide advice and practical support to assess feasibility and encourage risk taking; access to an infrastructure that supports innovation deployment through research, development and production; guidance on regulatory and financial aspects. There should be minimal barriers to accessing the services of the cluster. The cluster should also complement rather than compete within the existing ecosystem of business organisations and supports in the target region.

5.4 Governance: We see the triple helix model of business, local government and third level education and research as providing the strongest foundation for cluster success. This may seem as being somewhat at variance with the Knowledge and Innovation Communities (KIC’s) model but we take the view that education and research are different points along the same continuum while
local government brings a unique pillar due to its influence on the local regulatory framework, its position as an influential organisation in the region and its connection with the citizen. The governance structure adopted should be inclusive of the key stakeholders but manageable in size. The nominated representatives should have suitable influence within their own organisations and the experience and skills to add gravitas to the cluster.

5.5 Organisation: The cluster team should be sized appropriate to the scope of intended activities and the available funding. The team should have relevant experience and domain knowledge to be able to engage effectively with the senior managers of the target businesses to enable them to fulfil the cluster objectives. The associated working policies and procedures should be tailored around the operational needs of the cluster operation. Staff should be incentivised to achieve intermediate goals and to minimise staff turnover which can be very disruptive within a small and limited term team.

5.6 Funding: Building a functional, dynamic network of scale takes time; particularly in order to be able to make a quantitative assessments of results. In this context, ideally the funding provided should enable the operation of the cluster for an initial seven years (or five years at a minimum). In our experience three years is too short a duration to provide an objective assessment of benefit other than an intermediate report. Earlier termination should be possible if certain criteria are not being achieved but it is important to provide a longer horizon for activities to mature. The funding should obviously also be sufficient to recruit staff with the appropriate skills and to equip them with the appropriate systems to maximise productivity.

6. Conclusion

The funding for the Smart ECO Hub concluded on the 31st May 2015. There was strong interest from many of the members and the project team to see it continue uninterrupted however the complexities of cross border funding and the absence of support from a high profile champion resulted in failure to secure its future. An initiative to restart the Hub will be made over the summer but this will ultimately be contingent on securing additional funding as the company membership subscriptions would not be adequate without making the fees unaffordable.

Both the project indicator results and economic data gathered during the project evaluation highlight that ultimately the project was very successful with the funding for the project having been more than recovered during the project lifetime through increased revenue and other funding drawn down in addition to a number of jobs being created. Many more deals involving the members are
still in progress: one project alone having a €20m capital investment potential so there is clearly a significant dividend over time. Most importantly there is evidence of a growing vibrant, active network maturing as evidenced by many examples: as the project team continue to meet the members they are informed about additional business contacts and information that has been shared by other members, advice given and received between them, in addition to straight commercial deals where one is now selling to the other or joining forces on a joint bid, etc.

The cross border dimension has also been an important contributing success factor, particularly for the SME’s. Many of the SME’s while active in their home markets had little expertise or experience of working across the border and were generally reluctant to expend scarce resources to investigate. The Smart ECO Hub has provided them with a convenient and valuable information channel through both the various themed events and the brokered introductions which the Smart Eco Hub has arranged. These have facilitated improved understanding of the regulatory and economic differences, as well as providing practical solutions through the member companies actively representing each other or providing additional relevant business contacts for their use. There is considerable further scope for enhancing these cross border links through building better engagement at a practical level with the various local authorities and member companies through participation in projects, some of which could be eligible for funding support through programmes such as Horizon 2020. Similarly the third level institutes will also be beneficiaries of increased collaboration.

Despite a slow start the Smart ECO Hub has been very successful in a relatively short period of time, developing a vibrant network of companies which are actively increasing economic activity on both side of the border through growing collaborations and innovations which will further develop and mature. However we view this as a first step in an ongoing journey which we hope to continue in order to forge much closer links between the three strands of the helix which we know will result in much more sustainable and innovative businesses than has been achieved to-date.

Sources


Based on data from Central Statistics Office, Census 2011.


Based on CSO data, IDA Ireland & Enterprise Ireland Annual Reports 2013.