**ENVIRONMENT & FOUNDATIONAL ECONOMY IN WALES**

**SEMINAR REPORT**

**Sustainable Places Institute, Cardiff University 19th February 2020**

**Dr. Alan Netherwood - March 2020**

1. WWF Cymru supported by Netherwood Sustainable Futures ran a seminar on Environment and Foundational Economy in Wales on 19th February 2020 at the Sustainable Places Research Institute in Cardiff University. The aim of this seminar was to support the Wales Foundational Economy Network to:
2. engage key academics, policy experts and practitioners in Wales to agree how Environment (including biodiversity, natural resources and nature restoration) fits with emerging concepts and policy on the Foundational Economy –
3. to develop material to influence Welsh Government, including policy, Ministers, innovation funding[[1]](#footnote-1) and funded projects to ensure their work on the Foundational Economy also delivers environmental outcomes.
4. to provide input to a Foundational Economy Colloquium, in Cardiff in September 2020
5. Previous discourse on how environmental issues link to FE in Wales within the Network included:
6. a recognition of high and low carbon intensity activity within FE and the need to adjust and re--organise economic activity in Wales to encourage high well-being impacts with low carbon intensity, and address economic activity with high ecological footprint[[2]](#footnote-2)[[3]](#footnote-3)
7. a need to broaden the focus on environment and FE from decarbonisation to include biodiversity, natural resources and ecosystem services[[4]](#footnote-4): and the potential role of economic activity addressing these issues within emerging approaches to Environmental Growth from Welsh Government
8. the key role of food and public procurement in the FE and associated environmental impact [[5]](#footnote-5) the role of environmental quality in the initiatives which are linking people and place such as Skyline[[6]](#footnote-6)
9. The seminar was designed to build on this early thinking from Network members to provide space for attendees to understand and explore relationships between Environment and FE; to focus on biodiversity, natural resources and nature restoration to fill a current gap in conceptual frameworks

and discourse for FE; provide space explore both terminology and the direction of environmental policy in these areas to aid understanding; to explore the breadth of issues which need consideration including circular economy, material flows and decarbonisation. In designing the seminar the aim was to hear from key academics, practitioners and policy experts in this field on how Environmental outcomes link to FE; try pin down appropriate terminology, language, concepts, messages and research needs on Environment and FE and to make recommendations on strategy;

levers; practice and research. There is a growing body of literature and practice in this field, which was also referred to in designing the seminar.[[7]](#footnote-7)

1. The seminar was chaired by Prof Karel Williams, facilitated by Dr. Alan Netherwood, with Prof. Terry Marsden welcoming all attendees to the Institute. The list of invited attendees is included in Appendix A.
2. A series of short presentations were provided to ‘set the scene’ for the seminar, drawing on the expertise of the speaker, to focus on the relationship between the Environment and FE in Wales. All these presentations and draft chapters are available from Wales FE Network including:
   1. *The challenge of foundational renewal* by Prof Karel Williams and Prof Julie Froud, presenting work on Foundational Economy 2.0, based on their work with Luca Calafati, Colin Haslam, and Sukhdev Johal in the Foundational Economy Collective. This focused on how FE 2.0 in Wales, has the twin challenge of planning well-being of future generations in an unsustainable world and the challenge of foundational renewal post 2020 to confront climate change and secure biodiversity.
   2. Prof. Kevin Morgan drew on his forthcoming chapter *Foodscapes of Hope: The Foundational Economy of Food[[8]](#footnote-8)* based his research to illustrate foods’ role in addressing multiple policy issues, including social, economic and environmental well-being, and the role of initiatives like the Soil Association’s Food for Life Initiative in addressing a shift from moral economy to foundational economy of food.
   3. Agri-Food and its relationship to FE was explored by Prof. Terry Marsden based on his paper

*Building diverse, distributive and territorialized agri-food economies to deliver sustainability and food security* with Ana Moragues-Faus, Barbora Alderová and Tereza Hausmanová. This focused on the characteristics of diverse and distributed economies and economies based on a place-based approach – drawing on Welsh examples to illustrate them.

* 1. Dr. Andrew Flynn reflected on why environment matters in local communities related to its’ management, the relationship between circular economy and FE and the challenge of constructing futures that align resource management/environmental protection with a diversity of social practices: urban-rural; gender; age and wealth.
  2. Jen Pride from Welsh Government provided an overview of Wales-wide energy policy, emissions reduction, energy generation and export and the energy system. The cost of energy as a foundational enabler, and the cost and value of localised energy were raised as key questions in her presentation.
  3. Jess McQuade from WWF Cymru finished the series of presentations by reflecting on Natural Resources; Biodiversity; Ecosystems and Ecosystem Services within the context of Welsh legislation,’ this included an overview of Nature in Crisis; and the relationship between the natural environment and Foundational Economy in a restorative economy (environmental growth) approach.

1. A facilitated discussion then took place focusing on the presentations –then attendees were invited to use MeetingSphere to explore the broad relationship between Environment and the Foundational Economy following this. Tables 1 and 2 record some of the key issues emerging from this exercise.[[9]](#footnote-9)

**Table 1:** **Relationship** between Foundational Economy and the Environment -Attendees were able to focus on some of the key conceptual issues when thinking about the relationship between FE and the environment– many of these were framed as questions and statements. It is suggested that a key ‘ask’ from this exercise was for WFEN to develop and communicate a conceptual model that illustrates the relationship between the two.

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| Nature and Natural Capital is the foundation of the Foundational Economy.  Focus on the Foundational Economy’s role in transforming unsustainable systems of production and consumption.  Environmental costs need to be internalized in debates about local and national economies – can FE help us to do this?  Are we trying to reconceive the Foundational Economy – or just explore the relationship between the Natural Environment and FE? Do we redefine the ‘iceberg’ or bits of the iceberg?  FE activity impacts on the natural environment through carbon, water, waste, land-use. This is not accounted for in local economic models  We need to focus on Wales not exporting its ecological/carbon footprint through economic development. How does sustainable consumption fit within the FE conceptual framework?  Can FE approach progress restorative approach towards the natural environment?  The value of FE as an approach which is asset based - it means building on what you have got. This forces us to understand and value the assets we have and can unlock - including nature in a restorative way.  Need to recognise that many natural assets are so damaged they cannot be ‘used’. Environmental limits need to be taken into account.  The FE is an opportunity to test new approach to economic development which hopefully we can learn from an apply to national large economic decisions.  Economic terminology: well-being economy; circular economy; foundational economy needs clarifying in relation to complex ‘environmental terminology’; ecosystems; ecosystem services; biodiversity; nature-based solutions; SMNR; especially in communicating interconnections to policy makers and decision makers.  We need a conceptual model to help us think through and communicate the relationship. |

**Table 2:** **Strategic issues** related to Foundational Economy and the Environment - The exercise provided a wide range of contributions on how strategy, in all of its forms might support or inhibit a coordinated approach to pursuing environmental outcomes through FE work and FE work supporting environmental restoration. Ongoing work by policy makers and WFEN partners needs to acknowledge these issues/factors and questions in support of government, policy makers and practitioners.

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| There is a need to construct effective alliances to deliver environmental outcomes through FE agenda, with legitimacy and resources, including government, public sector, community sector and businesses  Is the Welsh Government approach to land management and public goods focusing on the role of the Foundational Economy? Are internal government links on this issue being made?  Has the National Development Framework taken the Foundational Economy into account to develop a joined-up approach [*note: there is no reference to FE in the NDF*]?  How does NRWs work on Area Statements link to and support the Foundational Economy in communities?  There is no mention of FE in; Brexit and Our Land; Farming and our Land or within the Food Strategy. There is a disconnect in FE thinking in one part of Government and normative approaches in others. FE is an opportunity to test new approaches to economic development.  There is a lot resting on Natural Resources Policy and Area Statements to ‘do the job’.  Government supported structural change is required in farm subsidy to support local markets.  A key question is what Natural Resources Policy (NRP) require of Foundational Economy? NRP outlines ecosystems services; supporting; provisioning; regulating; cultural and that productive capacity is maintained (soils, plants, pollinator health; water abstraction) and climate adaptive capacity is maintained (landscape management). [ Are these relationships recognised in economic policy through Government?  Brexit provides an opportunity to bring things together through policy formation and delivery and work with the devolved governments.  We need to move past trying to create a 'state of mind' through principles and ways of working and start doing more actions which will deliver tangible results.  .  The new sustainable land management scheme will not see legislation and specific developments until after the next election and transitioned to by 2026. This will mean there will be another NRP before that happens, so it isn't really delivering on the current NRP.  The Well-being of Future Generations and Environment Acts are not encouraging adaptative management [which might explore FE & Environmental outcomes] they are tick box exercises |

**Table 3:** **Critical Issues for Delivery** of Environmental and FE Outcomes: The following contributions provided with some initial insights on critical issues for the delivery of both foundational economy with environmental outcomes in Wales. Many of these focused on the aspiration for experiment and challenge normative approaches to policy, funding and delivery.

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| * the impact of investment in big infrastructure projects on both foundational economy and environment * the role of land management tariffs * policy focus and business perceptions are on tradable growth economy rather than the foundational narrative * the role of organisational risk management in encouraging/inhibiting alternative approaches * continued and wide political support and tolerance for experimentation * FE approach as a political risk? * improving cross governmental work to link environment with FE * effectiveness of the community of practice for FE on environmental outcomes and restorative approaches * senior policy makers and the deputy minister coordination * local people, local communities and local authorities need to be central to emerging approaches need to be at the heart of this. * the extent is Welsh Government willing to challenge the notion of the 'core farm business' in future support * making good practice e.g. PHW office furniture approach – the norm * convincing big business to alter their practices to support FE |

**Table 4: Questions & Aspirations**- The material from this exercise also provided a range of general questions, aspirational comments and ‘asks’ in relation to Foundational Economy. The following table provides a sample of these: They provide some insight into how attendees view the ‘challenge’ of delivering a foundational economy which supports the environment and vice-versa.

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| * establishment-level acceptance is likely to be very important and is not there at present. is there a way to promote this agenda in a more establishment-friendly way without diluting its potential? * what is the vision for 'foundational farming' and what are its significant differences versus status quo? * agriculture is a key part of the circular economy ... shift from payments and activities to payments and outputs / outcomes. * agricultural reform - do we need as much grazing land? horticultural land, arable land, what land is for? is there too much of a focus on designated landscapes? * could the foundational economy be the catalyst for changing the way we plant and grow trees in wales? provide jobs, meet carbon targets, etc. * if 21st century production of nutritious food required significantly less land use, which could include localised, sheltered and climate controlled, high nutrition productivity facilities, what could/should land use look like? * managed foundational forestry, for carbon capture and storage and for raw materials in circular economies (e.g. modern, sustainable, cellulosic fabric mills for clothing etc.). * economics of extraction, consumption and waste are massive. circular economy shouldn't be a second class second hand economic model - important to frame circular economy as best. |

1. Attendees were then invited to undertake the first of three exercises to focus on particular themes of the ‘environment’ and its relationship to the Foundational Economy. These were in turn; biodiversity; secondly food; thirdly energy and decarbonisation; and finally, via Meetingsphere on a weblink; resource efficiency[[10]](#footnote-10) For each of these themes’ attendees were asked the same five questions – the biodiversity exercise is shown below as an example:

* what is the **relationship** between biodiversity (outcomes) and FE?
* what relevant **policy/strategy** that can help to achieve these outcomes?
* what are the available **levers** to apply to develop practice?
* what are the **practical applications** of this relationship to projects on the ground?
* are there any **relevant research/projects** which can inform practice in Wales?

1. Attendees provided observations and insights on these questions using MeetingSphere, and were able to type in their views, see each- others views and respond to and build on this information. The bulk of the seminar involved round-table discussion and input into multiple tablets on each desk. This enabled the facilitator to move attendees on – to answer each question in turn. Lunch and breaks occurred between each of the first three themes. In total the attendees generated 374 comments on FE and all four themes[[11]](#footnote-11).
2. The following three sections of this report provide an overview of the response to these questions NATURAL ENVIRONMENT– which delegates broadened out from biodiversity; FOOD and ENERGY and a short synopsis of online responses on RESOURCE EFFICIENCY. The material is a synthesis and collation of this data.
3. **NATURAL ENVIRONMENT** The following table summarises the information provided by attendees on biodiversity- attendees broadened this out to focus on the natural environment**.**

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| **What is the relationship between natural environment (outcomes) and the Foundational Economy?**  expand focus how FE approaches can support nature, natural resources, ecosystems, nature restoration as well as biodiversity…..  ….at the same time as considering the relationship of environment to current categories in the FE model (e.g. food; housing; health; tourism; transport).  what FE delivers for the environment is currently limited by these categories. Do we need to refine the FE model as a result?  focus on place-based services, including ecosystem services and how environmental outcomes are delivered in that space.  focus on how nature supports FE through green infrastructure, pollination, landscape management and food production.  we need to understand the impact of FE ‘components’ on biodiversity and the natural environment.  food production and the services that surround it are a fundamental part of many rural (and urban) economies. FE approach needs to consider this  focus on how nature attracts people to a place – giving it a commercial value through tourism. e.g. role of eco-tourism for natural assets; natural features; iconic species. | **What relevant policy/strategy can help to achieve these outcomes?**  Environment Act (EA) and Future Generations Act (WBFGA) should be driving connections between FE and Environment agendas and this is not happening.  Welsh Government needs more policy integration between their work on economy and NRP e.g. FE Approach and Funds & National Development Framework  Planning Policy Wales and National Development Framework should be driving NRP objectives within FE framework. They don’t.  NRW led Area Statements identify where natural resources need restoration. They identify risks, priorities and opportunities. They should be used to inform FE development in a place-based approach. |
| **What are the available levers to apply to develop practice?**   * tourism bedroom tax for local nature restoration * public sector sustainable procurement * land-owners payments for ecosystem services * local market development * small business rate relief * community land ownership * agri-land management schemes * hypothecated council tax for nature restoration * property and land tax reform * land value tax * increased penalties * investment in enforcement * demand a place-based, restorative approach to funded FE projects via project management mechanisms and conditions * land ownership transfer to local communities * adapt mowing, planting and maintenance regimes * establish halting biodiversity decline and biodiversity enhancement as key criteria for contracts and specifications | **what are the practical applications of this relationship to projects on the ground?**  **are there any relevant research/projects which can inform practice in Wales?**   * evaluate existing FE projects on this agenda * provide innovation funding for natural resources related to FE * measure and monitor biodiversity and environmental quality through funded projects * wider environmental focus to inform social impact procurement * establish an Environment Act experimental fund * exercise referrals to enhance or restore biodiversity * develop Apps for engaging with environmental monitoring through funded projects * PSB procurement projects * Swansea Green Infrastructure Plan * Nature restoration through Eco-schools |

1. **FOOD** The following table summarises the information provided by attendees on food**.**

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| **What is the relationship between food, environment and the Foundational Economy?**  food production [within economies and ‘place’ rely on yet damages the environment. There is a huge impact and a huge opportunity to resolve impacts.  In examining the relationship between FE and Food we need to consider: the attractiveness of food production for non-farming families and opportunities in urban areas arethe role of food in deprivation including the impact of food price increases and availability of food for lower income familiesshift to localised, environmentally friendly supply chains e.g. food services, allotments and community gardens as opposed to extractive long supply chainsfood can provide the basis for community development, including community- based businesses and opportunities to develop community cohesion in localities through food events/workshopsfoods’ role in foundational economy can involve sharing of resources, seeds, manure, equipmentre-skilling the workforce for more food-based, land management, seasonal jobstechnology has a role to enable more food production in places in Wales where food is not normally produced; and in reducing food productions’ environmental impactland ownership [and planning] is a crucial issue in developing local food economies e.g. community farming movementthe difficulty of [FE] influencing a demand led industry | **What relevant policy/strategy can help to achieve these outcomes?**  need to re-align the Welsh food sector to be more reflective of local need and Welsh food needs. Current production and export is not foundational.  need to ensure that all post-Brexit strategy related to the food system is based on management of natural assets [as a primary aim]  There are a raft of strategies [which need to better support, drive and co-ordinate FE activity on food?]:   * Post-Brexit Sustainable Land Management policy & funding including reform of CAP payments * Planning Policy Guidance * Public Services Board Well-being Plans * Area Statements * Wales Food & Drink * Wales Sustainable Farming * Public Sector Asset Management * Local Authority Farm ‘conditions’ * Asset Transfer   Critical issues to resolve in strategy to support Food in FE are:   * real living wage * land rights & purchase * farm co-operation [within place?] * supply chain support * community equity   Also critical is developing models that enable locally led action – this requires trust and new approaches to governance.  A key target might be that “Wales transitions to Agro-ecology by 2030  [ Agro-ecology refers to farming practices that rely on ecosystem services rather than on external inputs] |
| **What are the available levers to apply to develop practice?**  In addition to above strategic levers…   * Post -Brexit agricultural funding * provision of funding schemes [to promote FE & sustainable food?] including sustainable management scheme (SMS) * land tax reform * community right to buy [land?] | **Levers to develop practice continued**   * public procurement – contract requirements in supply chain * regulation and licensing [of local food production and purchase?] * [better?] farm pollution enforcement * targeted regulation and standards to incentive good management practices in FE & Food |
| **What are the practical applications of this relationship to projects on the ground?**  Seed sharing  Manure sharing  Machinery rings  Food banks  Experimental farms  Experimental land management  School run farms and small- holdings  Food growing for community purchase  Infrastructure for food::   * processing * production * distribution * waste   Social enterprises to   * fund food processing plants * distribute food   Pollinators: ban pesticide use on public-owned land | **Are there any relevant research/projects which can inform practice in Wales?**  Existing activity supporting Food/Environment in FE in Wales   * Food Networks (e.g. Cardiff) * Permaculture Twyi – training and practical support * Farm to Fork * Incredible Edible Schemes * PLANED Sustainable Agriculture Network * Oldham example * Trussel Trust Food Bank Network * Big Lunch (Eden Project) * Carnegie Trust – Food & Kindness * Cardiff Bute Park Salad Project * Vision 21 & United Wales Housing Association Food Delivery Scheme * Wye Valley Hereford Grassland Association * Sustainable Management Schemes funded through Rural Development Programme   Research needed:  Map where we can grow crops and capabilities of the Welsh Landscape  Map circular economy & FE relationships with Food and develop a narrative for Wales on this agenda.  Applied experimental research on farm supply chains [and contribution to FE?] |

1. **ENERGY** The following table summarises the information provided by attendees on energy, environment and decarbonisation.

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| **What is the relationship between energy, environment and the Foundational Economy?**  Massive investment is needed in infrastructure in Wales to support energy distribution, local energy generation and storage.  Planning policy; absence of an effective grid across Wales implies a policy need.  Sophisticated systems of IT are also required to manage local supply and demand.  Likely to always be a need for big scale generation - maybe with a percentage of community ownership. Targets for community energy generation are relatively low [in comparison to what?]  Cost of grid-connection is prohibitive to many local energy projects.  Wales is well placed to produce more renewable energy than it uses.  De-carbing homes - means new jobs, high low carbon skills, stronger supply chains, more local renewables generations - and opportunities to engage communities to help support transition/local sustainability.  Local doesn't always mean lowest carbon. There can be trade-offs.  Low carbon communities project (10 years ago) offered good insight into how to enable community decarb. This would include embedding advice and development jobs in the community they are serving.  Community ownership of energy generation can potentially reduce community opposition (onshore wind).  Is there potential to do a big round of knocking down inefficient houses and rebuild them to be carbon neutral? Involving compulsory purchase, the planning system.  WCVA/Environment Wales showed that behaviour change could deliver carbon reductions equivalent to technological ones in some instances. | **What relevant policy/strategy can help to achieve these outcomes?**  There are a raft of strategies [which need to better support, drive and co-ordinate FE activity on energy/decarbonisation?]:  [Prosperity for All: A Low Carbon Wales (76 levers & 24 interventions) many of which apply to FE sectors: skills; district heat; procurement; tourism; housing; homes; regulation; infrastructure; agriculture; land management.]  Better Wales Better Homes. Decarbonising 1.4 million Welsh homes through *Better Homes* is a major opportunity to help the transition to a low carbon economy.... with housing associations as actors working on 150,000 homes.  Local Ownership of Energy Policy Statement[[12]](#footnote-12).  Warm homes/fuel poverty programmes  social housing policy, Part L building regs- encourage local contractors, reduced miles for transport of construction materials, promotion of local timber in modular buildings |
| **What are the available levers to apply to develop practice?**   * incentive systems that mean that communities who are generating energy are benefiting through subsidy * social licensing for grid operators and generators * land transaction tax to drive efficiency - giving discounts for efficient housing. * changes in energy pricing structure. * regulatory frameworks e.g. for micro hydro schemes. * carbon literacy in RSL and other key groups * subsidised cost of grid connection for local energy projects. * [supporting] bottom up Transition Towns activity**.** * citizen assemblies at local level to help what scale and pace of change for that area and best ways for transition to low carbon economy | **What are the practical applications of this relationship to projects on the ground?**   * rural car sharing schemes * technical support for small or local schemes,. * investment in battery storage trials at local   level.   * use of local timber or low carbon, locally produced cement in construction. * Transition Towns * electric car clubs. * we need demonstration projects |
| **Are there any relevant research/projects which can inform practice in Wales?**  Wales Spatial Plan Low Carbon Wales did big research / stakeholder projects into regional decarbonisation.  WFEN need to:  • draw on all the previous work WG done on this and use it to build on, not repeat. e.g. Sustainable Living Grant Scheme 2010  • draw on maps key actors energy generation and distribution; but also, in energy use.  • engage with key actors in energy generation and distribution  • need a Community of Practice for the housing/decarb agenda.  • better understand energy connections to transport.  IWA - Re-energising Wales.  Support could be offered to identify what interventions would be best to develop a low carbon [foundational economy and then support PSB [and other key actors] s to invest in these.  In Wales, we have learning and co-operation deficiencies rather than a lack of research. | |

1. **RESOURCE EFFICIENCY**

The online response and input into this theme was very limited. Only 18 online comments were made across the questions.

The following is a summary of these insights on resource efficiency with many echoing earlier comments on other themes:

* the need for far more integrate policy development to address resource efficiency, foundational economy and environment
* the need to challenge cross- sector organisational response on resource efficiency to encourage this within FE
* a need to learn more from and gather examples of where this is already happening from different sectors on resource efficiency (for example from WRAP) and find mechanisms to share that learning on for example, resource efficiency social enterprise which would support FE
* a need for continued funding and support of innovative practices which support this area of work, which will in turn address environment and FE
* the need to evaluate existing resource efficiency activity within the FE and understand its wider application and upscale e.g. what more do they/we need to know to make this practice the norm within FE

WRAPs provide a useful overview of a resource efficiency focusing on farming and growing, retail, recycling, construction, including materials, water and other resources[[13]](#footnote-13).

In terms of practice – a major issue for the WFEN to explore is the relationship between the Circular Economy and FE. An example of this is the activity supported by the Circular Economy Fund[[14]](#footnote-14)will help accelerate Wales' shift towards a circular economy by increasing demand for recycled materials, keeping resources in circulation instead of being incinerated or ending their life in a landfill, and supporting the growth of businesses operating in Wales.

A key broader question was to what extent regional/city deals etc. are being challenged around resource efficiency, how are they supporting those areas to deliver on this and in turn, supporting the foundational economy

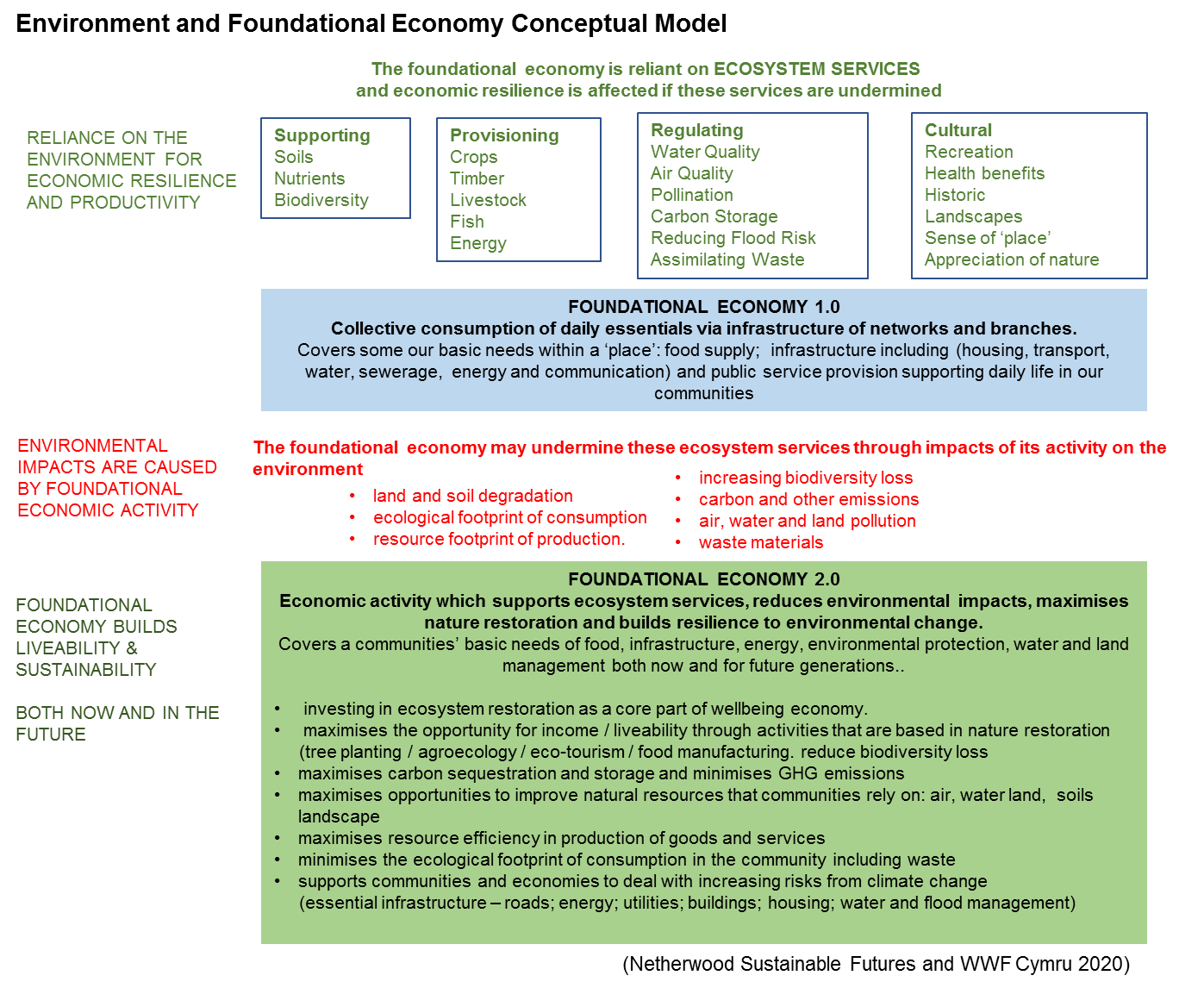
It is recommended the WFEN return to this theme in detail in one of its quarterly meetings inviting contributions on the relationship between the Circular Economy and FE (WRAP?) and from social enterprises which focus on resource efficiency, to understand their contribution to FE.

1. **BRIEF ANALYSIS**

Reflecting on the material from the workshop and previous discourse on the issue within WFEN (see 2.). some key issues have emerged which are briefly addressed in this section. These comments are intended by the author to be built on and discourse within WFEN, FE i practitioners, policy makers, those currently in Government and the Network itself.

* 1. **Recognising both reliance and impact**

1. FE 2.0 needs to acknowledge that economic activity of any kind is reliant on natural systems for both *resources* inputting into the economy and for *ecosystem services* (including biodiversity) which help to make communities function economically over the long term. Each community (and local economy) has their own unique reliance and relationship with the ‘environment’ dependent on local circumstances.
2. FE 1.0 activity within its component sectors[[15]](#footnote-15) has impacts on the environment and natural systems which can be addressed through resource efficiency and management practices. Clearly these impacts should be minimised.
3. The challenge of FE 2.0 is not only to minimise these impacts, but to ensure where possible FE activity can be restorative to Wales’ environment – building resilience of Welsh communities to wider and longer -term trends of natural resource depletion, biodiversity crisis and climate impacts on the community.
4. Arguably, FE 2.0 should not just focus on impacts and their management, but how environmental restoration can build community resilience, thereby supporting economic activity over the long-term e.g. landscape scale management to reduce flood risk, so a town (its high street and services) can actually function in the future.
5. FE 2.0 should have ecosystems services and natural capital at the centre of its ‘model’ rather than a bolt on to the original ‘sectors’ in FE 1.0. This is ‘redesigning the iceberg’ rather than components of the iceberg. Any conceptual model being developed on this issue should fill the current gap to account for the role of the natural capital environment in supporting the Foundational Economy, The following diagram is an initial step in outlining the above relationship between the environment and foundational economy:



1. This is more than a conceptual issue. This is a communication issue in order to address a long-term, multi-decadal schism between those working on environmental and economic outcomes throughout government and the public sector in Wales. Could FE 2.0 with the ‘environment’ at its centre help to communicate the relationship within local economies and as a result, encourage activity which builds both the foundational economy and the resilience of natural systems, which the economy relies on?

14.2 **Policy Integration and Levers**

1. It is clear from the seminar that many current national, regional and local policy approaches for the economy, environment, food, energy do not identify how their objectives, interventions, targets and funding mechanisms support the Foundational Economy – even though many are designed to support the different ‘sectors’ in FE 1.0.
2. A key issue is which of these policies and strategies are critical to help to build and communicate the FE concept through government, local authorities and other key actors in coming years, and how can this be done? If the National Development Framework, City Region and Ambition Deals and post-Brexit Farming and Land Management and Well-being Planning discourse are failing to make the connection – what can be done by policy makers and Ministers to ensure more effective policy integration within the civil service, Ministerial portfolios, public and other sectors?
3. This gap needs addressing –

* in order for businesses, supply chains, procurers, entrepreneurs and others involved in local economies to be steered towards FE thinking.
* to develop a broader approach (and conditions for) FE beyond the funded projects
* in order to make the most of opportunities emerging from post-Brexit policy development including payment for ecosystem services, the role of public goods between now and the next election and beyond

1. There is potential for work on Area Statements by NRW and its partners to develop this thinking and action in local communities. Resource efficiency, nature restoration and climate change have emerged as core themes in consultation on Area Statements across Wales – a key question for NRW and others is now these have been identified as priorities, what next? Can approaches to address these issues in localities also take into account how the FE might be strengthened or undermined by action/inaction?
2. Similarly, the seminar also identified a wide range of levers to support the ‘environment’ through FE and vice versa – these levers are complex and varied and their origins lie in many different parts of government and the public sector. These include land tax, innovation funding; regulatory mechanisms, subsidy, licencing, enforcement – the normal sticks and carrots to drive change. Further work needs to consider which of these are feasible/critical to develop to support environmental outcomes through FE activity – this is perhaps a specific issue which could be explored by the FE Community of Practice?

**14.3 Focus on place -based practical solutions**

1. A strong theme from the discussion was the need for ‘environment’ and FE to be considered on a place-based practical level, grounded in communities not just in sectors or themes (transport, housing, energy, food) or regional or national scales.
2. There may be a benefit in focusing on a particular place as a whole to think through the relationship between FE and environment:, its town centre businesses, agricultural economy, surrounding land management, flood risk management, access to food, water resources and energy infrastructure, assets, community networks, patterns of production and consumption.
3. Perhaps future innovation funding for FE could use this approach in addition to its current predominant project focus? Or existing projects could widen their focus to a whole place approach to FE and environment? Communities are not homogeneous entities, and FE and environment issues will look very different in rural/urban or coastal/inland or deprived/affluent communities. Which types of communities in Wales might be good to pilot this type of approach to learn and understand connections, relationships and practical applications?
4. Attendees were able to identify areas of activity or practice which might impact on the resilience of the FE, or enable the FE to support nature restoration, these were listed, but their relationship with FE activity need exploring in more detail – I have called these **place-based system** issues:

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| 1. forestry; land management; farming; soil management; water resource management; food (consumption, production; social networks) biodiversity management (e.g. pollination); flood risk management; emergency planning; energy security, community energy & fuel poverty; decarbonisation; green infrastructure; transport infrastructure; skills in all of the above |

* 1. .
  2. These issues are complex, inter-connected and will be unique to each community and place. This complexity will present challenges in engaging with and communicating to decision makers and understanding their value to the local economy. It is this space where it is suggested the greatest value of exploring the relationship between FE and the environment will be.
  3. An example might be the role of local land management in carbon storage and sequestration to tackle greenhouse gas emissions. How this is pursued in the locality impacts on the Foundational Economy via incentive/subsidy/payment to a landowner. How can our understanding of the FE account for the local economic impact of this activity and its wider societal value?

1. Attendees were also able to identify practical issues which might result from the environmental impact of FE activity from different sectors – I have called these **direct impact** issues:

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| 1. energy efficiency; waste management; transport impacts; resource efficiency in consumption and production of goods and services within the economy; renewable energy assets and figures on local energy production and consumption |

* 1. Arguably these issues are simpler for decision makers to understand, may be more measurable and may offer a more visible and practical solution to minimise the impact of FE activity on the environment. They do not however address issues of longer-term planning for economic resilience in communities through SMNR[[16]](#footnote-16) and dealing with for example, climate risk, energy, water or food security – issues which, it is suggested that FE 2.0 activity as advocated by Karel Williams et al. in the seminar - should be addressing.

1. It is strongly recommended that further discourse on this issue distinguishes between these different perspectives in a similar way. There is a real danger that Environment & FE is distilled into discussion of direct impacts rather that place-based systemic issues.
2. Attendees were able to give many practical examples of how both FE and environmental outcomes could be delivered in communities at the same time. This establishes what this might look like on the ground, and in turn, helps to communicate to practitioners and funders in Wales the types of activities which could be pursued through an integrated approach. These are shown in the box below. It should be noted that many of these activities have been developed in the past and are happening in Wales, but not at scale, and perhaps need to be more strongly linked to emerging thinking on the Foundational Economy and its impact on ‘place’.

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| --- |
| community based food production; carbon sequestration through land management; tree planting schemes to reduce flood impacts; landscape management to reduce wildfires; social impact procurement; conservation based health referrals; community based environmental monitoring (tree & pollinator health); machinery rings for land management; infrastructure and social enterprise for food processing, production and processing; community energy infrastructure; social enterprises for food production, processing and distribution; social enterprises for resource provision and waste; community transport car pools; meantime use of land resources for conservation and food production; micro-renewables on built assets. |

1. It is recommended that WFEN do not try and boil this down to ‘low-hanging fruit’- and focus on single issue interventions to explain the relationship between Environment and FE as ‘community energy’ or community food projects’ or ‘low energy housing’. The relationship is more diverse. A question which might be worth exploring within WFEN is how might a community’s foundational economy be strengthened if all the above activity was taking place? What and where are the benefits and opportunities and ripple effects across the foundational economy which might make the environment, local economy and place resilient at the same time?

**D. Past evidence and new alliances**

1. It should also be noted that attendees were able to list a wide-range of past and current projects being implemented that are relevant to this agenda, these are shown in the tables points 10-13. While many are Government funded, it must be recognised that many activities in this space are also being delivered via the community and third sectors; local authorities; and through collaboration independent of Welsh Government. The authors view is that much of this work is unconnected at present to the FE agenda yet contributes to it. Developing approaches to FE in Wales should acknowledge the contribution of this activity and learn from it
2. Similarly, there has been much work done by Government in partnership with other key actors in this space on Sustainable Communities, via grant schemes such as Environment Wales and Environment & Sustainable Development Grant; through energy efficiency schemes; via the Rural Development Programme Schemes including landscape level projects, as well as the new EnRAW grant and the activities of organisations such EST, Carbon Trust and WRAP.
3. As we progress into post-Brexit arrangement with a focus on payment for ecosystems services and public goods, how can we learn from these bodies of work to pursue environmental outcomes through FE, and at the same time ensure that FE contributes to nature restoration? What can WFEN learn from this wide variety of relevant activity? What does it tell us about how FE 2.0 in Wales needs to develop? These are questions that merit further investigation, and this seminar has been able to begin this drawing on the insight of experts from academia, practice and policy to explore these questions.
4. A five-hour seminar of this nature will inevitably cover a whole host of strategic, theoretical and practical perspectives and it is difficult to distil this, at this stage into a set of specific recommendations for politicians, policy makers and practitioners. However, the following are some final observations which might steer WFEN’s thinking:
5. for ***Welsh Government civil servants & Ministers***: if FE is to be the frame through which local economies are to be viewed and built, then there needs to be far stronger integration of the concept into policy, strategy, relevant objectives, actions, funding across both economic and environmental policy for key players to respond. This is vital going into the next election (whenever that may be) and beyond. Without this integration and consistent message, it is unlikely that normative approaches which separate environmental and economic policy delivery will be challenged
6. there is no simple ‘to do’ list for the 50+ ***Foundational Economy Projects*** which have already been funded. It is understood that specific environmental outcomes were not part of setting these projects up, and it will be difficult to ‘retrofit’ these in. However, the types of practical activities discussed in this paper could be explored with the funded project through the Community of Practice local opportunities to pursue environmental outcomes through funded projects could be identified. Where these do occur, approaches and outcomes should be part of evaluation of the project. Any further funding of FE should more explicitly require deliverers to focus on nature restoration as part of the bidding process.
7. for ***Wales Foundational Economy Network***:

* there may be merit in exploring the relationship between environment and FE at a place-based scale rather than through a sectoral or resource efficiency lens. It is suggested that WFEN members seek support for two community-wide pilot projects exploring ways in which foundational economy activity could support nature restoration in two localities (rural and urban?)
* this applied research could be designed to engage community, agencies, utilities, local government, business and supply chains in two communities in exploring ways in which FE activity could support nature restoration, resource efficiency and minimise environment impact
* learning from these pilots could inform, policy development (pre- and post-election) future rounds of FE funding and the wider FE research agenda

1. It is suggested that much more work needs to be done to demonstrate the synergy between FE and environment including the type of practical, community based, live research suggested above. In order to engage key audiences and to develop alliances – this sort of evidence will be a far stronger mechanism to “develop effective alliances” than papers, conferences and models
2. While the WFEN provide an informal network to develop understanding and discourse and guide Welsh Government, it is suggested that the network build on this seminar via IWA and other members (if they are willing) and the Community of Practice to develop Wales’ thinking on this issue

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27/03/2020

**APPENDIX A – ATTENDEES**

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| --- | --- |
| Alan Netherwood | Netherwood Sustainable Futures/Cardiff University |
| Alex Phillips | WWF Cymru |
| Andrew Flynn | Cardiff University (School of Geography & Planning) |
| Andy Rees | Welsh Government (Waste) |
| Ben Sears | Welsh Local Government Association |
| Chris Blake | Skyline Project- Green Valleys |
| Christian Servini | Office of Future Generations Commissioner |
| Claire Sain-ley Berry | Wales Council for Voluntary Action |
| Colin Haslam | Queen Mary University of London |
| Dafydd Thomas | Well-being Planner (FE Fund Project) |
| David Fernnadez Arias | Luxon Ltd guest of Karel Williams |
| Emily Finney | Welsh Government (Natural Environment) |
| Jack Watkins | Institute of Welsh Affairs (Foundational Economy) |
| Jen Pride | Welsh Government (Energy) |
| Jess McQuade | WWF Cymru |
| John Gossage | Natural Resources Wales (Economy) |
| Julie Froud | Alliance Manchester Business School |
| Karel Williams | Alliance Manchester Business School |
| Kevin Morgan | Cardiff University (Sustainable Places Research Institute) |
| Lee Waters | Deputy Minister for Economy & Transport Welsh Government |
| Lloyd Jones | Bevan Foundation |
| Marion Stapleton | Welsh Government (Economy, Skills Natural Environment) |
| Matthew Quinn | Cardiff University (Sustainable Places Research Institute) |
| Ruth Tipping | Natural Resources Wales (SMNR) |
| Steve Cranston | United Welsh Housing Association |



APPENDIX C – KEY REFERENCES

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1. Welsh Government Foundational Economy Challenge Fund [↑](#footnote-ref-1)
2. Luca Calafati, Jo Earle, Julie Froud, Karel Williams Foundational Thinking and Future Generations in Wales, Paper. (February 2019) [↑](#footnote-ref-2)
3. Luca Calafati and Joe Earle: Well-being and the Welsh economy: Bevan Foundation [↑](#footnote-ref-3)
4. Jess McQuade, Luca Calafati, Joe Earle, Karel Williams: Paper for the WG Ministerial Advisory Foundational Economy Sub-Group: The Environment and the Foundational Economy in Wales (April 2019 [↑](#footnote-ref-4)
5. Kevin Morgan - Procuring for Wellbeing: from good intentions to good practice Kevin Morgan, Cardiff University, Foundational Economy Event February 2019 [↑](#footnote-ref-5)
6. Steve Cranston (FGC) Future Generations Act, Foundational Economy Event February 2019 [↑](#footnote-ref-6)
7. See references at end of report: [↑](#footnote-ref-7)
8. Forthcoming in: *The Foundational Economy and Citizenship* (Policy Press) Edited by Filippo Barbara and Ian Rees Jones [↑](#footnote-ref-8)
9. Please note – the original data is available from WWF Cymru for research purposes [↑](#footnote-ref-9)
10. Due to lack of time on the day, RESOURCE EFFICIENCY was dealt with via MeetingSphere – a weblink was established and attendees were sent the link – and asked to answer the same questions on-line in relation to this issue. The link remained open for 3 days after the seminar. [↑](#footnote-ref-10)
11. Please note again – the original data is available from WWF Cymru for research purposes [↑](#footnote-ref-11)
12. https://gov.wales/sites/default/files/publications/2020-02/policy-statement-local-ownership-of-energy-generation-in-wales.pdf [↑](#footnote-ref-12)
13. <http://www.wrap.org.uk/content/resource-efficiency-businesses> [↑](#footnote-ref-13)
14. <http://www.wrapcymru.org.uk/grants> [↑](#footnote-ref-14)
15. foundational goods and services across the population, which arises from their role in ‘supporting everyday life the utilities, including piped or cabled services such energy, water and sewerage; retail banking; food and petrol retailing; food processing; networks and services such as rail or bus for transport and distribution of people and goods; telecommunications networks; health, education and welfare/social care. <https://www.iwa.wales/agenda/2019/02/what-is-the-foundational-economy/> [↑](#footnote-ref-15)
16. Sustainable Management of Natural Resources – as advocated in Environment Act & Natural Resources Policy [↑](#footnote-ref-16)