'Scotland's Economic Future: Disruptive Ideas' is a paper series conceived and coordinated by Alison Hunter and Fabian Zuleeg. Together with a group of economic experts, policy analysts and commentators from Scotland and beyond, the papers have been developed entirely on a voluntary basis. Each paper presents the views of the individual writer concerning Scotland's economic future at a time of significant global and domestic change and uncertainty. While covering a wide range of topics from institutional reform to immigration, the papers share a vision for Scotland to make greater strides towards a resilient, economic future.

The papers aspire to the following aims:

1) To generate a fresh, apolitical and inclusive debate concerning Scotland's economic future
2) To support the process of new / revised policy adoption and new 'ways of working' which can be injected into Scottish life and society, with the aim of generating a better future for Scotland's citizens
3) To focus – at least initially – on a core set of themes linked to Scotland's economic development and to inject 'disruptive' thinking into the debate

We hope that you will find the content interesting, thought-provoking and worthy of wider discussion across Scottish society, such that the significant efforts from our contributors might be seen in future change and action across related economic policy fields. Please do not hesitate to get in touch with the individual contributors or the paper series coordinators if you wish to discuss further. And please do share with colleagues.

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Institutions, Transition and National Renewal: The Case for a New Scottish Approach

by Dr Robert Pollock

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Introduction

There shall be a Scottish Parliament, the first words of the Scotland Act, is a sentence that twenty-two years on remains implicitly charged with a promise of a new Scotland. Much has changed since the Parliament's creation but the seeming potential for profound national advancement carried in this bold assertion seems unrealised. Low productivity, an unbalanced economy, inequality and adversarial national discourse do not indicate that the country has entered a new inclusive epoch of development.

This paper contends that a redesign of Scotland's institutional system of governance is needed to promote national socio-economic development and a new economic model based on energy transition. Moreover, such reform is required to increase national resilience and responsiveness in a time of profound environmental change. To address the challenges and opportunities of transition to a net-zero carbon economy, this paper proposes key institutional changes to engender requisite collective and collaborative discourse, planning and action. Although independence would provide Scotland with additional powers, an evident rationale exists for institutional reform irrespective of the impending constitutional reckoning in order to respond to climate change in a manner that creates a more equitable, sustainable and productive economy.

Although the case for redesign of Scotland's institutional system is applicable across the policy landscape, the paper focuses on decarbonisation. By adopting this lens, the contention is informed by the actuality of a pressing national priority. It is a topical reference given the Scottish Government's establishment of a Just Transition Commission and a 2045 target for net-zero emissions; whilst profound, existential questions about the oil and gas sector loom large. The paper is divided into a number of sequential parts. Firstly, there is consideration of the need for institutional reform placed within the context of decarbonisation. To this end, the paper explores Scotland's experience with offshore wind to identify lessons for creating an institutional architecture to realise the potential of urgent decarbonisation. In turn, changes to Scotland's institutional system are proposed, before consideration of the impact of both action and inaction. Subsequently, barriers to achieving these new institutional arrangements are identified. Penultimately, the paper considers who should engage with this issue and why, before concluding with outline recommendations.

The Challenge of Institutional Change and Why it is Important

Given temporal perspective, it now seems obvious that the Scottish Parliament's creation in isolation should not have been viewed as a silver bullet for Scotland's long standing, path dependent challenges. Holyrood has not acted as a catalyst for a new unifying consensus or a blueprint for Scotland's future. However, it could never have been without a parallel redesign of the nation's wider institutional arrangements. Yet, rather than institutional boldness and innovation, a caution has been displayed, as evidenced by the use of the term Executive rather than Government in the Parliament's

first decade; a tendency towards unsystematic public initiatives and reforms; the absence of a new cadre of public servants who are collaborative system builders; and the continuance of organisational structures that pre-date devolution, such as the thirty-two unitary authorities and the enterprise agencies. The Parliament, unaccompanied by a redesign of the institutional environment in which it is only one player, albeit an important one, meant that the creation of consensus and collaborative action amongst diverse actors on which national reinvention is dependent has been elusive. Moreover, the Parliament's inability to foster an inclusive and settled national vision and narrative has been stymied by the predisposition of its dominant occupants to treat the institution either as a means of maintaining the Union (1999-2007) or ending it (2007-2019). These positions have reduced Scotland's future to being conditional on constitutional circumstance, which subsequently leads to increasingly mono-dimensional, polarised debate. It is a debate with a high opportunity cost. This paper does not subscribe to a panglossian view of the world and accepts that a debate on Scotland's constitutional future will consume passions and energy in the coming years. Even so, the paper contends that a parallel collaborative process relating to decarbonisation and the related opportunity for national socio-economic renewal also needs to be simultaneously pursued.

Before progressing, it is useful to clarify what is meant by institutions in this case and why they are important. This paper is concerned with Scottish public institutions that frame and shape the actions of the nation's socio-economic actors. These institutions fall into three inter-connected categories:

- Formal institutions - legislation, regulations and policies;
- Informal institutions - dominant conventions, practices, competences and behaviours; and
- Organisational forms - government and its departments, national agencies, local authorities etc.

These three institutional categories combine to create an interacting system for enabling or constraining the action of socio-economic actors, providing them with incentives and prompts to break from past practice, or disincentives and constraints to limit change. Furthermore, this institutional system facilitates or impedes co-ordination and collaboration across actors, mitigating or consolidating vested interests and tensions, and regulating the effective use of society's resources.

More specifically, this institutional system is key for creating a more equitable, sustainable and productive Scottish economy premised on decarbonisation. To date, energy transition has been dependent on multi-scalar institutions creating the policy framework and shaping the technologies for renewable energy via a range of institutional innovations, such as legally binding emission targets, conducive regulations and subsidies, and state funded R&D. Energy transition is being driven at the international level, for example by the United Nations Framework Convention on Climate Change (UNFCCC) and the European Commission (EC), and at the UK, Scottish and local levels. This process illustrates the multi-scalar nature and conditionality of effective government action in many contemporary policy domains i.e. policy synchronisation can be as important as autonomy. In short, successful modern government is predicated on inter-scalar alignment, rather than just the accrual of more power within geographic borders. It is also worth noting that institutional innovation in parallel with the emergence of disruptive technologies has been an enduring formula for the reinvention of small nations, often in seemingly peripheral positions. In the fifteenth century, Portugal's embrace of new technologies relating to cartography, navigation and ship design coupled with a redesign of

national institutions, led it to becoming the first global maritime empire. In the 1990s, Finland allied ICT and institutional reforms in order to rapidly re-orientate and globalise its economy.

However, some might ask why there is a need to overhaul Scotland's institutional framework. Such a question exposes a reluctance for significant institutional reform, outside the binary constitutional debate on independence or status quo. Often in public discourse one hears that Scotland's relatively small size, in terms of population and geography, and distinct institutions, such as law and education, mean that it can be fleet of foot and institutionally joined-up and responsive to challenge and opportunity. This is true to a point but, given the nation's enduring shortcomings, it would be wrong not to question this position. It is one that does not pay due cognisance to the nation's complex reality and inheritance in terms of culture, class, geography, health, religion, life chances, and empowerment among other factors. Before devolution such heterogeneity and the institutional deficit to manage it were obscured and mitigated by Scotland's framing within the larger political structures of the UK and, until the 1960s, the Empire (and, to a lesser extent, the European Union from the 1970s onwards). Moreover, these structures provided an external focus for the energies of Scottish institutional innovators and system builders[1]. Therefore, the national institutional environment that greeted the reconvened Scottish Parliament was not one that was geared for the generation of a shared national vision or the mobilisation and co-ordination of diverse actors required for its attainment. Given this institutional deficit, devolved government faced an uphill struggle to deliver the new Scottish epoch anticipated by many.

Lessons from Offshore Wind

In order to illuminate the requirement for a redesign of Scotland's public institutional environment, especially in the context of decarbonisation, the case of Offshore Wind in Scotland offers insights and lessons. Exploration of this experience is not to criticise but rather highlight the need for change if the nation is to capitalise on its noteworthy efforts and plans to decarbonize. The Scottish Government has for over a decade prioritised the generation of the nation's electricity from renewable energy sources. This internationally lauded ambition has been supported by a programme of legislation and policy, notably the commitment to generate 100% of Scotland's electricity from renewable energy sources. However, despite significant progress towards this target, the projected economic benefits have not materialised. This is extremely concerning given that previous energy transitions have been catalysts for sustained periods of national development: coal in the Central Belt; hydropower in the Highlands; and oil and gas in the North East. In terms of offshore wind, only a small fraction of the tens of thousands of new jobs that a publicly funded study in 2010 said could be created has materialised[2]. It is a divergence between forecast and outcome that can be attributed to institutional circumstances.

The broader institutional environment which framed the Scottish Government's offshore wind ambitions was extremely conducive to its agenda (e.g. 2007 EU Emission Targets, 2008 UK Climate Change Act, 2008 Crown Estate seabed leasing round, 2009 UK subsidies for offshore wind projects). This institutionally created opportunity seemed particularly favourable to Scotland, a nation with 25%

[1] The author Ismail Kadare, Commandeur de la Légion d'Honneur, observed that the absorption of the talents and ambitions of small countries into larger political constructs has profound long term consequences for the former.

[2] Scottish Offshore Wind: Creating an Industry, IPA Economics, 2010

of Europe's offshore wind energy resource. Moreover, Glasgow was the base for two of the UK's principal offshore wind developers, Scottish Power and SSE, the former being the global offshore renewables HQ of its parent company, Iberdrola. In addition, the Scottish university base was seen as a particular asset; and in 2011 The Economist singled out Glasgow's Strathclyde University[3] as the biggest asset for the development of the industry in Scotland.

In response, a number of eye catching Scottish institutional developments were progressed. In 2009, The Crown Estate in liaison with the Scottish Government identified ten Scottish zones for offshore wind development with the potential to make the nation the largest global generator of offshore renewable electricity. A year later the Scottish Government established Marine Scotland, a directorate to facilitate planning and consenting of offshore wind farms. In the same year, the Scottish Government introduced a national infrastructure plan for key offshore wind manufacturing and support sites and a related industrial strategy[4]. Nevertheless, these notable policies were arguably hampered by insufficient pragmatism in their application. The infrastructure plan offered an extensive list of heterogenous coastal sites which may have kept an optimal number of local politicians content but which failed to send clear messages of prioritisation and intent to investors. Moreover, although Glasgow was the centre of the industry in Scotland, in terms of skills, research and capability, this status was not readily recognised by the Scottish Government. The potential success of Glasgow at the expense of east coast locations was seemingly viewed as inconvenient and there was a hesitancy to promote Glasgow as a capital for offshore wind akin to Aberdeen's position for oil. Moreover, in terms of industrial strategy, the Scottish Government signed five memorandums of understanding with OEMs to encourage the location of their turbine manufacturing facilities in locations across Scotland[5]. In the event, none of these corporations located manufacturing in Scotland. Although national agencies were actively encouraging investments via incentives including R&D grants and test facilities, Scotland had limited control over the factor with greatest bearing on corporate decision making: the level of subsidy for offshore wind projects, which regulated the size of the market.

Although there was undoubtedly innovative policy making in Scotland there was a lack of cognisance, perhaps denial, of the asymmetry of power between Edinburgh and London in regard to the development of the offshore wind industry. Moreover, this asymmetry became more acute as UK Governments changed from Labour to the Coalition in 2010 and to the Conservatives in 2015. Over time, the UK subsidy regime on which Scotland's offshore wind industrial development was dependent was severely reduced. In addition, an increasing disregard in London for Scottish ambitions was evident, as demonstrated by the removal of Edinburgh's limited powers for providing targeted subsidies to offshore wind developers. Nevertheless, Scotland did not seem to play its hand in the most advantageous manner. Despite the Scottish Government building strong relationships with utility companies and OEMs with a Scottish locus, it never exhibited the same priority in influencing key institutional players south of the border. Even though Scotland's ambitions required to be framed within the UK electricity market context, there was a seeming absence of a crafted, united tactical response by Scottish actors to this multi-scalar reality. While Scottish civil servants felt that Whitehall

[3] In the late 19th Century Professor James Blyth of Anderson College (Strathclyde University's precursor) invented the wind turbine. A century later, the Glasgow engineering company, Howdens, designed, manufactured and supplied the first large commercial wind turbines to UK and US markets.

[4] National Renewables Infrastructure Plan (NRIP), Scottish Enterprise and Highlands and Islands Enterprise, 2010; Scotland's Offshore Wind Route Map, Scottish Government, 2010

[5] Areva; Doosan Babcock; Gemesa; Mitsubishi; and Samsung.

was primarily interested in the industry's development in England, UK civil servants felt that the Scottish Government was ploughing its own course in isolation. Competition rather than collaboration became the seeming default position of both governments[6]. In addition, the ability of Scottish actors to track the debate within Whitehall seemed partial. The Treasury, DECC, BIS, Cabinet Office and DCLG all had differing views on the industry's development. In effect UK policy was a Rubik's cube of horizontal (energy), vertical (industrial) and spatial (regional) policy positions that required to be understood and managed, if not exploited, by Scotland. Many Scottish public servants were slow to comprehend the profoundly negative implications of interacting UK policy changes for a Scottish industrial renaissance based on offshore wind.

In addition to the above, there was partial comprehension of the potential evolution of offshore wind technologies. In turn, the five MoUs signed by the Scottish Government with new entrant OEMs came to naught, whilst the two incumbents with which the Scottish Government had no MoUs, Siemens and Vestas, captured nearly all of the UK market. Additionally, global supply chains and corporate procurement led to the eventual projects in Scottish waters having limited impact on the Scottish industrial base, as demonstrated by the uncertain fate of Bi-fab and the import of components of a publicly supported floating wind farm. Critically, as noted earlier, technology when linked with institutional reform can fundamentally re-orientate the fortunes of small economies. Tellingly, this outcome in regard to offshore wind mirrors much of Scotland's post-war institutional relationship with technology. Exogenous technologies, often promoted by corporations, have been frequently embraced by Scottish public actors with insufficient comprehension or control over their evolution thereby leading to failure (e.g. Chunghwa Picture Tubes, Cadence semiconductors, Intermediate Technology Institutes) and crisis (the demise of Silicon Glen).

Ideas for changes to the nation's institutional system

In order to create a more equitable, sustainable and productive Scotland, premised on the unfolding socio-economic transition process of decarbonisation, a number of key changes to the nation's institutional design, capacity and culture are proposed. These are divided into the three previously noted institutional types: formal institutions; informal institutions; and organisational forms.

<u>Formal Institutions</u>

- Legislation, regulation and policy need to be understood and designed as a framework of interacting transition triggers (recognising that these institutions if not synchronised can also act as brakes). The inter-dependencies and relationships between horizontal (e.g. energy, inclusion), vertical (e.g. industrial, transport) and spatial (e.g. regional, urban, rural) policies need to be mapped and co-ordinated, thereby facilitating optimisation and prioritisation of public resources. Moreover, the multi-scalar reality of institutionally driven transition needs to be recognised (i.e. the international/EU, UK, national, local levels). Regardless of the future constitutional status, there will be a need to constructively engage and collaborate with London. Ludovic Kennedy, the late broadcaster and journalist, once compared Scotland's relationship with England to being in bed with an elephant. Even if the two nations separate, the elephant will still be close by.

[6] Given this outcome, it can be deduced that the Scotland Office was unsuccessful at brokering and facilitating collaborative win-win working relationships between both governments.

- Scotland needs to be more tactical in its deployment and co-ordination of its institutional powers and more effective in influencing extra-national powers. Only by integrating and synchronising public spending, projects and initiatives and departmental plans within such a framework can the nation optimise its chances of engendering a new economic model based on energy transition. In order to secure such change, greater emphasis needs to be placed on informal institutional and organizational development.

Informal Institutions

- In terms of competences, practices and behaviours, there is a need for more public servants who are system builders. These individuals and their cadres need to design and manipulate the Rubik's cube of legislation, regulation and policies; and join up, collaborate with and influence differing policy jurisdictions and domains, including across UK and EU/international scales, to facilitate transition and optimise socio-economic benefits.
- There is a necessity for greater technological and industrial insight within the Scottish public sector, including greater prescience of the evolution, market dynamics, life-cycles and related corporate strategies of transition technologies and value chains. Such enhanced competence will allow robust due diligence, assessment and prioritisation of technological and industrial options both homegrown and foreign-owned. It will also allow insight into which transition technologies Scotland, due to its unique combination of socio-economic, geographic and market characteristics, is best placed to incubate, scale-up, and subsequently export.
- Policy making needs to be imbued with both ambition and pragmatism. Scotland should play with the ball at its feet whilst building the relationships, in Brussels, London and beyond, to ensure that it is a key international player and exemplar. Realism will still allow Scotland to excel globally, if it prioritises its choices, effectively utilises the powers, tools and assets at its disposal – whilst influencing those which are not - and builds societal consensus and mobilisation. Decarbonisation should be promoted and adopted as a national mission.

Organisations

- The creation of a National School of Government and Transition would act as a mechanism for developing the capacity within Scottish government (and potentially civil society and private sector) for socio-economic development based on decarbonisation. Additionally, it would allow a new generation of public servants to develop the skills, competences and behaviours to better understand, facilitate and manage institutional innovation and technological change. Not only would this organisation be a catalyst for successful socio-economic transition, it would act as an example and a means of interface with other nations which are also dealing with this time-critical challenge.
- Energy transition is a global and national mission of existential significance that can foster national consensus and mobilisation. A carbon convention to align multi-stakeholder ambitions, mitigate vested interests and competition, and develop a common vision, narrative and blueprint for institutional change, could act as a model for other Scottish multi-actor forums.

The impact of both inaction and action for Scotland's economy and society

The impact of inaction is potentially very high, including continuing low economic growth (circa 0.2% p.a. since 2008) and, more importantly, low productivity. In 2018, the EC estimated that the EU could double its economy by 2050 even if it decarbonises. Given recent performance this seems unlikely in the case of Scotland, especially with the loss of oil and gas. Scotland's transition to net-zero, even if the 2045 target is attained will, if current approaches are maintained, generate only partial socio-economic benefit. The nation will continue to fail to convert its significant decarbonisation ambitions and assets into notable levels of employment and enterprise creation. Just Transition will seem a hollow mantra for those who have lost their jobs in carbon intensive industries, if there are no new, future-orientated industries with quality jobs to compensate. Finally, there are limited other opportunities for developing a unifying narrative and model of national development across diverse actors.

The impact of action is potentially very high, including a more dynamic and productive economy based on industries and technologies that reflect and respond to Scotland's unique transition assets, characteristics and opportunities. This can lead to creation and evolution of enterprises that are rooted in Scotland and which have a competitive advantage in global markets, offering technological solutions to the planet's transition dilemmas. Such enterprises can create quality and skilled employment across urban and rural Scotland, which will mitigate the adverse economic impact of energy transition in carbon intensive industries. Moreover, as past energy transitions have transformed Scotland's communities and society and contributed to global development, this latest opportunity can also be harnessed to create a more equitable, internationally dynamic and connected nation. Finally, institutional change as described in this paper will facilitate the creation of a new national model of development (that aligns with the UN Sustainable Development Goals) which promotes collaboration across diverse actors and optimises the use of scarce resources.

Barriers to change and overcoming them

Many barriers to change are cultural and behavioural in nature, including institutional and cognitive lock-in, vested interests and aversion to collaboration. There is also the question of whether a constitutionally neutral, unifying vision and narrative relating to energy transition can be created and adopted in politically charged times. Moreover, let us not forget the elephant. Both London and Edinburgh Governments need to be open to pursuing win/win institutional synchronisation. Despite these barriers, the pressing existential reality of climate change and the opportunity to create a more equitable, sustainable and productive nation, is a compelling reason for common endeavour and collaboration.

Who should engage with this issue and why

In the first instance, it would be good if a small, representative set of stakeholders engaged with this issue. This would include both the Scottish Government and the Scottish Parliament (perhaps via the Scotland's Futures Forum) and also bodies engaged in public sector reform and professional development, such as the Improvement Service and the Economic Development Association of Scotland. The perspectives of the private sector, industry, the workforce and academia would require the inputs from bodies such as the SCDI, FSB, Scottish Renewables, STUC and Fraser of Allander Institute. In order to effectively consider institutional reform, decarbonisation and socio-economic

change, transition experts, NGOs and civil society should engage with the issue. There should also be the involvement of voices interested in new organisational forms and instruments (such as the Scottish National Investment Bank, the Just Transition Commission, the Scottish Futures Trust, Wellbeing Economy Alliance, Collaborative Scotland). The recent findings of the Infrastructure Commission for Scotland relating to decarbonisation should also be considered[7]. Furthermore, given the inter-generational nature of transition and the temporal impacts of climate change, young people should be engaged in this process early on. Finally, the Office of the Secretary of State for Scotland (formerly the Scotland Office) should act as a dynamic and facilitative interlocutor with Whitehall.

Outline recommendations

Scotland's energy transition ambitions are commendable and internationally noteworthy. However, there needs to be a redesign of Scotland's institutional framework (formal and informal institutions and organisational forms) to ensure that these ambitions are translated into significant socio-economic benefits across Scotland. Given the need for mobilisation, consensus and co-ordination across a wide range of actors and the pressing temporal realities of transition, this process of institutional change needs to take place over the next few years. Although independence will bring more powers to the Scottish political domain, transition need not be framed within a constitutional reference. Furthermore, the multi-scalar institutional reality and conditionality of transition needs to be further recognised and addressed within such a redesign.

Swift research on the need for institutional reform and consultation across the stakeholders noted above should lead to the formation of a carbon convention to generate a costed and commonly endorsed plan for institutional change to engender transition that will be a catalyst for the nation's socio-economic development. This convention and its aims could be announced during the COP 26 in Glasgow, thereby offering a uniquely Scottish perspective on the shared global mission of decarbonisation and placing the nation's ambitions in a multi-scalar context. The plan should reflect other policy initiatives, such as the outputs of the Just Transition Commission, and be delivered by 2022. Time is short.

[7] A Blueprint for Scotland, Infrastructure Commission for Scotland, 2020