

LABOUR PARTY CONSULTATION ON INDUSTRIAL STRATEGY SUBMISSION FROM THE SCHUMACHER INSTITUTE

The Schumacher Institute

- 1 The Schumacher Institute (TSI) is an independent think tank that studies the economic, social and environmental challenges faced by the planet and its people. We apply systems thinking to explore and test sustainable options, which acknowledge the complexity of our world. We see social justice as integral to sustainability and look for answers that are fair to all, within the limits that the Earth can sustain.

Introduction to the Submission

- 2 TSI welcomes the opportunity to comment on the development of the Labour Party's Industrial Strategy. We think it particularly important that any strategy be based on a clear set of principles and objectives, as is proposed in the consultation documentation. We strongly commend the principles of being challenge-led, mission oriented and values-driven, and welcome discussion of objectives relating to jobs, productivity, sustainability, regional balance and sectoral balance. In our view, as explained below, it is particularly important to prioritise the sustainability objective. We also welcome the breadth of the consultation, encompassing a wide range of potential interventions, consideration of key features of the economic environment and key aspects of institutional framework. In this submission, we focus on what basing an industrial strategy on the above principles, and on the priority objective of sustainability, should mean in practice, and consider the implications for achievement of the consultation documentation's other objectives. In doing so, we draw on evidence and understandings from: current practices in communities and businesses, leading stakeholder organisations; associated policy reviews; and a range of academic disciplines and studies.
- 3 The structure of the submission is as follows. Firstly, we identify fundamental ecosystem and social challenges. Secondly, we summarise the concepts and practices for economic transformation that are intended to meet the ecosystem challenges. Thirdly, we focus on key themes of industrial strategy and associated policies that should help enable the economic transformation to be delivered. Fourthly, we look at the implications for achievement of wider objectives. Finally, we make some comments on economic growth.

Fundamental Ecosystem and Social Challenges

- 4 Our starting point is that recognition of profound eco-system and social challenges should inform the development of industrial strategy and, as far as is possible, be addressed by that strategy. The eco-system challenges relate to future exhaustion of key natural resources and the breaching of boundaries for critical processes that regulate the functioning of the earth system. The social challenges relate to persistent

and severe inequalities and unfulfilled needs, and associated feelings of disempowerment, disenfranchisement and disconnectedness. If industrial strategy is indeed to be challenge-led, then it must provide a framework for Government intervention to help tackle these huge challenges.

- 5 We welcome the inclusion of a sustainability objective in the consultation documentation, and the recognition of the need for a “just transition” to alleviate the global climate change crisis and for “systemic changes” in the way we organise our economy and society. We would like to stress, however, that the challenges to planetary limits and boundaries go wider than climate change. On the exhaustion of resources, early warnings were provided in the Club of Rome’s 1972 report on the Limits to Growth, which set out the dynamic nature of our dependency on physical resources and on ecological systems. It illustrated the processes of ‘overshoot and collapse’ that can occur when limits are approached and suggested that, without a shift in direction, adverse consequences would become obvious “within the next century”. In their 2016 review of the original Limits to Growth report and subsequent debate¹, Jackson and Webster conclude: “there is unsettling evidence that society is tracking the ‘standard run’ of the original study – which leads ultimately to collapse. Detailed and recent analyses suggest that production peaks for some key resources may only be decades away”.

- 6 The concept of planetary boundaries was introduced in 2009² and includes a set of nine boundaries for critical processes that regulate the functioning of the earth system. These relate to climate change, ocean acidification, ozone depletion, novel entities (e.g. chemical pollution), aerosol loading, biosphere integrity (biodiversity loss), biochemical flows (nitrogen and phosphorus cycles), freshwater use and land-system change. Crossing these boundaries takes us into ‘zones of uncertainty’, with heightened risks of reaching thresholds or tipping points that could generate abrupt or irreversible changes on a colossal scale. If we stay within the boundaries, current scientific knowledge suggests a very low probability of crossing a critical threshold or substantially eroding the resilience of the earth’s eco-systems. Since 2009, the global research community has taken up the planetary boundaries concept as a scientific agenda, leading to an important update and revision in 2015³. This concludes that we have crossed four of the boundaries into ‘zones of uncertainty’ (climate change, biosphere integrity, biochemical flows and land-system change), and that for two (biosphere integrity and biochemical flows) we have moved beyond the ‘zones of uncertainty’ into ‘high risk zones’. Scientific research on the latter two boundaries suggests an urgent need to achieve key international targets for biodiversity conservation⁴, and

¹ Jackson T and Webster R, ‘Limits Revisited: A Review of the Limits to Growth Debate’, April 2016, <http://limits2growth.org.uk/wp-content/uploads/2016/04/Jackson-and-Webster-2016-Limits-Revisited.pdf>.

² Rockström J, et al, ‘A Safe Operating Space for Humanity’, Nature 461, pp.472-475, 2009.

³ Steffen W, et al, ‘Planetary Boundaries: Guiding Human Development on a Changing Planet’, Science, 13 February 2015: Vol. 347 no. 6223.

⁴ See, for example, Cardinale B J et al, ‘Biodiversity Loss and its Impact on Humanity’, Nature, June 2012, which reviews understanding of how the loss of biodiversity affects the functioning of ecosystems and the services they provide for the functioning of society.

for radical changes to agri-food systems and the use of fertilisers, including dietary changes, waste prevention and nutrient recycling⁵.

- 7 The importance of operating within resource constraints and planetary boundaries is increasingly recognised in international policy circles⁶, by businesses⁷ and other organisations, including the TUC⁸. There is a growing demand for work on planetary boundaries to be translated from their global and regional-scale viewpoints to support sustainability decision-making at national levels. This work is now well underway, with researchers having undertaken various planetary boundary analyses for China, Sweden, South Africa, Switzerland, and the European Union, and with proposals for a more systematic conceptual framework for translating planetary boundaries to national or regional implementation⁹.
- 8 A further conceptual development is the idea of a '*safe and just operating space*', introduced by Raworth in 2012¹⁰. This presents a visual framework – shaped like a doughnut – which brings planetary boundaries together with social boundaries, based on the premise that achieving sustainable development means ensuring that all people have the resources needed – including food, water, health care, and energy – to fulfil their human rights. Raworth relates the social boundaries to the eleven top social priorities identified by the world's governments in the run-up to Rio+20 including social equity, gender equality and 'voice'. According to Raworth, between the inner social and outer planetary boundaries lies an environmentally safe and socially just space in which humanity can thrive. This has become known as 'living within the doughnut'¹¹. Subsequent research has sought to develop the conceptual framework and present case studies which demonstrate proof-of-concept¹². This work seeks to provide a framework for helping to raise social conditions while reducing the likelihood of moving into dangerous operating spaces with respect to ecological boundaries.

⁵ See, for example, Kahiluoto H, 'Taking Planetary Nutrient Boundaries Seriously: Can We Feed the People?', Global Food Security, February 2014.

⁶ These issues informed the UN's new global development framework: 'Transforming our World: the 2030 Agenda for Sustainable Development', which sets out 17 Sustainable Development Goals and 169 targets. While the planetary boundaries concept is not mentioned explicitly in the 2030 Agenda, all nine of its system processes are addressed in some way, either as the focus of a goal or included in specific targets. See <https://sustainabledevelopment.un.org/post2015/transformingourworld>. This new global development framework was adopted in September 2015 by 193 Member States, including the UK.

⁷ See, for example, Unilever's approach to using the planetary boundary concept in Sim S et al, 'The Role of Science in Shaping Sustainable Business: Unilever Case Study', in R. Clift, A. Druckman (eds.), 'Taking Stock of Industrial Ecology', 2016.

⁸ See, for example, the statement about the need to operate within planetary boundaries in 'TUC and UK NGOs Statement to Rio 2012', <https://www.tuc.org.uk/international-issues/economic-developments/globalisation/international-development/tuc-and-uk-ngos>.

⁹ See, in particular, Häyhä T et al, 'From Planetary Boundaries to National Fair Shares of the Global Safe Operating Space — How Can the Scales be Bridged?', Global Environmental Change 40, 2016.

¹⁰ Raworth K, 'A Safe and Just Operating Space for Humanity', Oxfam Discussion Paper, February 2012.

¹¹ Raworth is due to publish a book, 'Doughnut Economics: Seven Ways to Think Like a 21st Century Economist', in April 2017, <https://www.kateraworth.com/>.

¹² Dearing J A et al, 'Safe and Just Operating Spaces for Regional Social-Ecological Systems', Global Environmental Change 28, 2014.

- 9 We think that work should be undertaken to operationalise the planetary boundary approach in the UK, including how to ‘live within the doughnut’. This should seek to identify resource and environmental caps, and associated reduction targets, which has been done for greenhouse gas emissions, and now needs to be extended to consider the other planetary boundaries. The work should draw on the growing research literature indicated above, and should provide an evidence-based approach for further policy development and implementation to address the profound eco-system and social challenges that we face.
- 10 In the meantime, it is clear from existing research on resource limits and planetary boundaries that the time to act is now. This is because the transformations needed to avoid resource exhaustion and the breaching of planetary thresholds need to take place some decades in advance of reaching those limits and thresholds. If we wait for extreme shocks and collapse to occur it will be too late to do much about them. This argument is of course familiar and largely accepted for climate change, but also needs to be recognised and acted upon for resource limits and other planetary boundaries.

Meeting the Challenges: Concepts and Practices for Economic Transformation

- 11 There are a range of concepts and practices for economic transformation that could help address today’s eco-system and social challenges. In this section we focus on two key concepts of central importance to industrial strategy - the Green Economy and the Circular Economy. In subsequent sections, we also make reference to ‘foundational’, ‘peer-to-peer’, ‘collaborative’, ‘sharing’ and ‘design global – manufacture local’ economies, as appropriate to business ownership, localisation and socio-technical innovation strands of strategy.

The Green Economy

- 12 As Jackson and Victor suggest, the ‘green economy’ is still a contested concept¹³. They point out that: “At its worst, it simply provides cover for business-as-usual - the escalation of unsustainable corporate practices that threaten the integrity of the natural world and undermine the resource base for future prosperity. At its best, the green economy offers a positive blueprint for a new economics: firmly anchored in principles of ecological constraint, social justice, and lasting prosperity.” A version of the Green Economy which has gained great traction encompasses the development of renewable energies and working towards decarbonisation *across all sectors*. A joint report from the TUC and Greenpeace in 2015 underlines the call for a ‘just transition’ to a new low carbon economy and discusses the practical implications, including the need for investment in clean energy, retrofitting homes and businesses, developing low carbon vehicles and transport infrastructure, and assisting industries that must change to survive, for example, energy intensive and aviation industries¹⁴. More recently, the TUC has renewed its call for a ‘green industrial strategy’, and outlined a

¹³ Jackson T and Victor PA, ‘Towards a New, Green Economy: Sustainable and Just – at Community Scale’, 2016, <http://thenextsystem.org/wp-content/uploads/2016/11/JacksonVictor.pdf>.

¹⁴ TUC and Greenpeace, ‘Green Collar Nation: A Just Transition to a Low Carbon Economy’, Economic Report Series 2015.

series of potential policy measures¹⁵. We welcome this call, but urge that thinking about the scope of the Green Economy be taken beyond the focus on renewable energy and decarbonisation to embrace the full range of ecosystem challenges, particularly relating to biodiversity and biochemical flows and the implications for agri-food industries (see para 6 above).

The Circular Economy

- 13 The concept of the Circular Economy is gaining considerable traction as a way of addressing the challenges of future resource exhaustion. It is based on the idea of cycles that preserve and enhance natural resources and optimise their use. The concept seeks to ensure that the economy neither creates waste, nor undermines essential material and nutrient cycles, or wider ecological and social systems, and is potentially applicable, albeit to varying degrees, across all sectors. A circular economy includes design for remanufacturing, refurbishing, recycling and reuse to keep components and materials circulating in and contributing to the economy. An overview of the sorts of actions that businesses and governments can take to transition to a circular economy has been provided by the Ellen MacArthur Foundation¹⁶. There is also a growing research literature on the challenges, practicalities and policies that need to be addressed in moving towards genuinely circular economies¹⁷, including the need to ensure that the strong emphasis on efficiency does not jeopardise system resilience¹⁸.

Delivering Economic Transformation

- 14 We think it essential that industrial strategy and associated policies address four core themes needed to support and sustain economic transformation. These are: mission-led businesses and strong sustainability; corporate governance reform, widening business ownership and spreading co-operative models; city-based devolution and localisation; and technological and socio-technical innovation. Each is considered in turn.

¹⁵ TUC, 'Powering Ahead: How UK industry Can Match Europe's Environmental Leaders', Economic Report Series 2016.

¹⁶ 'Towards a Circular Economy: Business Rationale for an Accelerated Transition', Ellen MacArthur Foundation, December 2015, https://www.ellenmacarthurfoundation.org/assets/downloads/TCE_Ellen-MacArthur-Foundation-9-Dec-2015.pdf,

¹⁷ See Despeisse M et al, 'Strategies and Ecosystem View for Industrial Sustainability', 20th CIRP International Conference on Life Cycle Engineering, Singapore, 2013; de Eyto A et al, 'Preparing for the Circular Economy: the Role of Design and Engineering Education in Ireland in its Implementation', Conference Paper 2016; and Ede S, 'The Real Circular Economy', Post-Growth/Fab City, December 2016.

¹⁸ Transformed economies need to be resilient as well as sustainable. Resilience is about ensuring a capacity to cope and adapt to future shocks and stresses. Researchers warn that too strong an emphasis on efficiency can erode resilience through a loss of redundancy (back-up capacity). They suggest that circular economies will be more resilient if there is diversity in the number of firms and physical exchanges in the system. See Zhu J et al, 'Exploring the Resilience of Industrial Ecosystems', Journal of Environmental Management 122, 2013, and Chopra S S and Khanna V, 'Understanding Resilience in Industrial Symbiosis Networks: Insights from Network Analysis', Journal of Environmental Management, 141, 2014;

Mission-led Businesses and Strong Sustainability

- 15 There is growing political interest in the UK in the idea of mission-led business. This led to the setting up of an advisory panel in April 2016 to report to the Government's Mission-led Business Review. The focus in the panel's work has been on profit-driven businesses with social missions, looking at how businesses can play a role in promoting "the greater good, broadening prosperity and tackling inequality". The panel recently published its report, highlighting in a letter to the Minister that:

Our aim has been to review the current status of mission-led business, develop a framework for understanding its impact and propose recommendations for government and the private sector.

Our numerous interviews and meetings over recent months have convinced us there is a new social contract developing between business and society, in which businesses engage with stakeholders beyond their current narrow remit to create benefits for employees, citizens and society at large.

We have found evidence that businesses that embrace social priorities perform better, reflect people's ideals and ambitions and so are primed for success. Of course, they also face challenges, particularly in securing funding and identifying appropriate legal structures to serve their purposes.¹⁹

- 16 We welcome the Advisory Panel's report, and although it does define 'social mission' to include environmental issues, we think that there is a need to inject a much stronger sustainability agenda into Government thinking about mission-led businesses²⁰. The importance of this has been underlined in a new report from the Business and Sustainable Development Commission (B&SDC), which calls for the adoption of new sustainable business models: "if a critical mass of companies should join us in doing this now, we will become an unstoppable force ... If they don't, the costs and uncertainty of unsustainable development could swell until there is no viable world in which to do business"²¹.
- 17 The B&SDC has championed the idea of the 'breakthrough' business model, introduced in a 2016 report by Volans²². This report addresses the ways in which the most forward looking companies around the world are radically re-fashioning their business models to deliver new forms of value based on innovative assessments of the

¹⁹ Advisory Panel to the Mission-Led Business Review, 'On a Mission in the UK Economy: Current State of Play, Vision and Recommendations', 2016.

²⁰ According to Business in the Community, a recent survey showed that 83% of CEOs see an increase in efforts by government and policymakers to provide an enabling environment for the private sector as integral to advancing sustainability, written evidence to the Business, Energy and Industrial Strategy Committee Inquiry into Industrial Strategy, 2016.

²¹ B&SDC, 'Better Business Better World', January 2017. The Business and Sustainable Development Commission was launched in Davos in January 2016. It brings together leaders from business, finance, civil society, labour, and international organisations. Its work is supported by the UK Department for International Development.

²² Volans, 'Breakthrough Business Models', September 2016. <http://volans.com/2016/09/breakthrough-business-models-how-to-drive-sustainable-growth-in-an-exponential-world/>.

requirements of sustainable development. According to Volans, the most successful business models of the future will focus on: direct and indirect social contributions; effective use of resources and capital; circular economy systems; and integration of the UN Sustainable Development Goals into business plans. The Volans report gives various examples of the ways in which companies are adopting and implementing key aspects of ‘breakthrough’ business models. In addition to the concept of ‘breakthrough’ business models, there is a significant and growing management studies research literature that underpins calls for a strong sustainability approach by business²³. We would add that a strong sustainability business model should also seek to ensure that the business contributes to the resilience of the economies in which it operates, and to localisation and the provision of quality jobs (see further sections below).

- 18 We think that consideration should be given to how industrial strategy and associated policies can help encourage and enable an increasing number and wider range of businesses to be mission-led, including the development and adoption of strong sustainability business models. This consideration should include review of the recommendations of the advisory panel to the Mission-led Business Review, which include, for example: encouraging and incentivising mission-led business by enabling blended finance investment models; promoting the flexibility offered under English law for companies to act with a social purpose; and requiring companies to report on progress in achieving their social missions²⁴. Consideration should also be given to the proposals contained in Co-operatives UK’s submission to the advisory panel, covering education, advice and support, access to finance and investment, and ways of addressing legal and regulatory barriers²⁵. We also welcome proposals for measures to create ‘demand pull’, including environmental taxes and regulatory approaches, as have recently been put forward by the TUC²⁶. The B&SDC has also suggested that strong sustainability businesses should work with policy makers to identify the practical measures that will further encourage and support economic transformation including, for example, ways of pricing the true costs of pollution and natural resource use²⁷.

²³ This includes, for example, research that develops: an ontology for ‘strongly sustainable’ business models; archetypes for sustainable development business models; a transition method for integrating sustainability into business practices; and a multi-stakeholder value mapping technique for embedding sustainability in business modelling. See: Upward A and Jones P H, ‘An Ontology for Strongly Sustainable Business Models: Defining an Enterprise Framework Compatible with Natural and Social Science’, *Organization & Environment*, Special Issue: Business Models for Sustainability: Entrepreneurship, Innovation, and Transformation, 2015; Bocken N M P et al, ‘A Literature and Practice Review to Develop Sustainable Business Model Archetypes’, *Journal of Cleaner Production* 65, 2014; Allais R et al, ‘Governance Maturity Grid: a Transition Method for Integrating Sustainability into Companies?’, *Journal of Cleaner Production* 140, 2017; and Short S W et al, ‘Embedding Sustainability in Business Modelling through Multi-stakeholder Value Innovation’, *IFIP Advances in Information and Communication Technology*, January 2013.

²⁴ Advisory Panel to the Mission-Led Business Review, ‘On a Mission in the UK Economy: Current State of Play, Vision and Recommendations’, 2016.

²⁵ Co-operatives UK, ‘Consultation Response to the Mission-Led Business Review’, July 2016, sections 15 and 16.

²⁶ McDowall W and Ekins P, ‘Green Innovation: Industrial Policy for a Low Carbon Future’, TUC Economic Report Series 2014.

²⁷ B&SDC, ‘Better Business Better World’, January 2017.

- 19 As part of these considerations, attention needs to be given to ways of preventing ‘mission drift’ away from strong sustainability business models. This can occur if corporate culture is not consistently supportive, or when ‘microeconomic disciplines’ assert themselves, for example, as a result of a lack of market confidence, the requirements of raising capital from external sources, price competition, cost inflation or shrinking market shares. The sort of industrial strategy and associated policies outlined in this submission should help militate against ‘mission draft’. There is a particularly important role here for proposals on corporate governance reform, widening business ownership and spreading co-operative models, as outlined in the next section.

Corporate Governance Reform, Widening Business Ownership and Spreading Co-operative Models

- 20 We think corporate governance reform, widening business ownership and spreading co-operative models can provide ways of increasing the likelihood of more businesses becoming and staying mission-led and, as outlined below, bring a range of wider benefits. We find it helpful to think in terms of a spectrum of measures of increasing strength, starting with wider representation in corporate decision-making, and progressing to increasing levels of employee, community or member ownership, adoption of co-operative models, and finally ‘not-for-profit’ legal forms. Each is considered briefly in turn.
- 21 Writing in a new Co-operative Party publication, authors from the RSA have argued that corporate governance reform is a positive lever of change to help reconfigure the UK economy²⁸. They argue that wider representation in corporate decision making can enable companies to be run in a way that distributes power, wealth and opportunity to those they employ and serve. The authors point to practices in Norway and Sweden where worker representatives take their place directly on the board of directors, and in Austria and Germany where workers and other stakeholders serve on supervisory boards that meet to review and inform the decisions of company boards. Writing in the same publication, Yeoman suggests that direct and representative worker voices on company boards can help foster mutual relationships that conform to civic and human values²⁹. The case for worker and stakeholder representation on company boards (amongst other potential representation reforms) is also advanced by contributors to a TUC report on corporate governance reform, who argue, for example, that this would stimulate innovation by engaging the creative energy of the workforce³⁰.
- 22 Commitments to consider ways of widening employee ownership of companies were a welcome part of the Shadow Chancellor’s speech to the Co-operative Ways Forward

²⁸ Patel R and Greenham T, RAS, ‘The Governance Challenge’, in ‘In Our Interests: Building an Economy for All’, Co-operative Party, 2017.

²⁹ Yeoman R, Centre for Mutual and Employee-Owned Business, ‘Mutuality, Meaningfulness and Employee Ownership’, in ‘In Our Interests: Building an Economy for All’, Co-operative Party, 2017.

³⁰ Williamson J et al (Eds), ‘Beyond Shareholder Value: the Reasons and Choices for Corporate Governance Reform’, TUC.

Conference in early 2016³¹. The Shadow Chancellor made reference to the Nuttall report on employee ownership³², including looking into creating a statutory right to request employee ownership and have proposals considered by their employers. The Shadow Chancellor raised the possibility of extending this approach, by offering employees first rights on buying out a company or plant that is being dissolved, sold, or floated on the stock exchange. In the light of evidence that employee owned businesses can encourage a longer term horizon on returns, with an emphasis on sustainable business development and innovation³³, we think there is a good case for carrying forward these commitments into the review of industrial strategy and associated policies. This should take into account that forms of indirect employee ownership (through trusts), or hybrid ownership, are likely to bring advantages over direct individual share ownership in terms of the business being and staying strongly mission-led³⁴.

- 23 We also welcome the commitment to look at ways of substantially increasing the adoption of co-operative models that was contained in the Shadow Chancellor's speech in early 2016. We think that this is particularly important in the light of the advantages that co-operative models bring, including member ownership, democratic control, and a fairer share of rewards and profits. These advantages have recently been set out by Co-operatives UK in relation to key issues for 2017³⁵. Co-operatives UK also sets out a range of proposals for 'levelling the playing field' to make it easier to start and run successful co-operatives³⁶, which we think should be given close consideration.
- 24 We would also like to illustrate the advantages of co-operatives by reference to their potential importance to peer-to-peer economies and digital platforms, in contrast to private companies such as Uber and Airbnb which it has been argued "suck the value" out of local economies and create a range of "precarious" occupations³⁷. For Bauwens, cooperatives provide a way for workers in such industries to own their platform, protect their members and reinvest their profits into their own network. Schneider adds that "promoting more democratic ownership and governance of online platforms is a way that cities can ensure that the Internet economy lives up to its promise as a true commons and a means of generating shared wealth"³⁸. Although examples

³¹ <https://party.coop/2016/01/21/john-mcdonnell-speech-at-co-op-ways-forward-conference/>.

³² Nuttall G, 'Sharing Success', Department for Business, Innovation and Skills, BIS/12/933, July 2012.

³³ Yeoman R, Centre for Mutual and Employee-Owned Business, 'Mutuality, Meaningfulness and Employee Ownership', in 'In Our Interests: Building an Economy for All', Co-operative Party, 2017.

³⁴ The Employee Ownership Association points out that forms of indirect or hybrid ownership encourage longer-term perspectives and make take-overs harder. In contrast, direct share ownership schemes can encourage a focus on shorter-term profits through dividends and, in some cases, sale of shares. See, for example, 'Employee Ownership: How to Get Started', <http://employeeownership.co.uk/resources/reports/>.

³⁵ Co-operatives UK, 'Key Issues and Positions for 2017', http://www.uk.coop/sites/default/files/uploads/key_issues_and_positions_2017.pdf.

³⁶ See <http://www.uk.coop/promoting-co-ops/levelling-playing-field>.

³⁷ Bauwens M, 'Uber Should be Regulated Like the Rest of the Economy', EurActive.com, July 2016, <https://www.euractiv.com/section/digital/interview/tues-michel-bauwens-uber-or-airbnb-should-be-regulated-like-rest-of-the-economy/>.

³⁸ Schneider N, 'Platform Cooperatives for Democratic Cities', in Ramos J M, Ed, 'The City as Commons: A Policy Reader', 2016, <https://cdn5-blog.p2pfoundation.net/wp-content/uploads/city-as-commons.pdf>.

of platform cooperatives exist³⁹, Schneider points out that widespread development will not be easy: “it will require an ecosystem of financing, legal resources, education, and community that, together, can create a runway for promising businesses”. The proposals for ‘levelling the playing field’ from Co-operatives UK (above) and for socio-technical innovation (below) would also help.

- 25 Finally in this section, it should be noted that the strongest way of preventing ‘mission drift’ is to adopt a ‘not-for-profit’ legal form, which precludes the making of private profit for directors, members or shareholders. These include social enterprises, such as Community Benefit Societies (where profits must be used for the benefit of the community, although interest on shares can be paid to members up to a maximum rate), and Community-Interest Companies (where directors can be paid, but profits are used for a social good). We think that industrial strategy and associated policies should see a growing role for these types of social enterprises.

City-Based Devolution and Localisation

- 26 We support the significant body of thought that industrial strategy should have a strong place-based emphasis, and that city-based devolution and localisation should be seen as a linked and complementary policy⁴⁰. We also welcome the RSA Inclusive Growth Commission’s call for Government to pursue a ‘grown up’ approach to city-based devolution, enabling places to respond flexibly to their specific challenges and opportunities with appropriate powers and the required level of funding⁴¹. The Commission rightly points out that devolution needs to be responsive to the complexities of place, and include those currently overlooked or overshadowed, particularly struggling urban areas and those with a more fragmented sub-regional geography.
- 27 Within the context of a strongly challenge-led industrial strategy and ‘grown up’ city-based devolution, it is important that local authorities are empowered and resourced so that they are in the ‘driving seat’ and can lead interventions in local economies in a transformative way. In order to do this, local authorities will need to:
- Work in concert with other local anchor institutions (see below), local businesses, the voluntary sector and local communities to respond to their place-based challenges and take opportunities to help build green, circular, resilient⁴², and foundational (see below) economies.
 - Encourage and support businesses to be mission-led and adopt strongly sustainable business models.

³⁹ <http://internetofownership.net/>.

⁴⁰ See, for example, written evidence to the Business, Energy and Industrial Strategy Committee Inquiry into Industrial Strategy, 2016, from the Centre for Local Economic Strategies, the Local Government Association, the New Economics Foundation (NEF) and the Sheffield Political Economy Research Institute (SPERI).

⁴¹ RSA Inclusive Growth Commission, ‘Emerging Findings’, 2016.

⁴² Some cities are developing actions for transformative economic change through ‘resilience strategies’. See for example, Bristol City Council, ‘Bristol Resilience Strategy’, 2016, and Barker F, ‘Resilience and Sustainable Development: Conceptual and Programme Linkages and Potential Next Steps in Bristol’, Schumacher Institute Challenge Paper, November 2016.

- Encourage and support wider representation in corporate decision making, widening business ownership and spreading co-operative models.
- Work with Local Economic Partnerships (LEPs) whose role should be to provide strategic business advice⁴³.
- Ensure that any new infrastructure and development is planned so that it contributes to green and circular economies and integrates with place.
- Ensure that high-tech initiatives such as ‘Smart Cities’ are focused on enabling citizen engagement and empowerment, addressing local challenges (such as traffic management and pollution control) and facilitating local economic transformation⁴⁴.
- Build agency, so that local people and communities are encouraged and enabled to take their own initiatives.
- Support those seeking to experiment, innovate and challenge in developing sustainable local economies (see socio-technical innovation below).
- Ensure that local economic strategies are aligned with social strategies, so that issues of inequality and inclusivity are effectively addressed.

28 The Centre for Local Economic Strategies (CLES) defines *anchor institutions* as having a key stake in a place, which create jobs and purchase goods and services, and which are highly unlikely to leave due to market forces⁴⁵. These organisations typically include: local authorities, universities, further education colleges, hospital trusts, and housing associations. Based on pioneering work with anchor institutions in Preston, the CLES argues that key to a good local economy is ensuring that the procurement and commissioning processes of anchor institutions are used, as far as is possible, to retain capital and activity within the local economy. CLES also highlight that it is important for anchor institutions to think about the scope for newly formed cooperatives to deliver services and provide goods, as part of their work on commissioning and procurement practices. They point to examples – particularly internationally - where this has been successful, with cooperatives delivering laundry, energy and catering services for a number of anchor institutions, including universities and hospitals⁴⁶. For the CLES, “local ownership enabling”, is a key next stage in developing a good local economy in Preston.

29 The Centre for Research on Socio-Cultural Change (CRESC) argues that the primary focus of industrial policy should not be a few favoured high technology sectors, but the *foundational economy*⁴⁷. It suggests that this economy depends on a kind of ‘social franchise’, either because it is directly or de-facto franchised by the state, or be-

⁴³ As argued by the Local Government Association in its written evidence to the Business, Energy and Industrial Strategy Committee Inquiry into Industrial Strategy, 2016.

⁴⁴ For some of the challenges that can be involved in Smart City initiatives, see Stokes P et al, ‘Smart Cities – Dynamic Sustainability Issues and Challenges for ‘Old World’ Economies: a Case from the United Kingdom’, *Dynamic Relationships Management Journal*, Vol. 4, No. 2, November 2015.

⁴⁵ Jackson M and McInroy N, ‘Creating a Good Local Economy: the Role of Anchor Institutions’, CLES, 2015. This report contains a detailed case study of the ‘Preston Model’, based on systematic engagement with anchor institutions across the city.

⁴⁶ Jackson M and McInroy N, ‘Creating a Good Local Economy: the Role of Anchor Institutions’, CLES, 2015.

⁴⁷ Bentham J et al, ‘Manifesto for the Foundational Economy’, CRESC Working Paper 131, November 2013.

cause ‘everyday’ household spending and tax revenue sustains its activities. According to CRESC, this justifies political intervention to challenge business models that privilege least cost and most profit, and which neglect national, regional and local economic security and sustainability. In other words, the social franchise dependency of the foundational economy provides additional justification for interventions to encourage and enable participating organisations and companies to take a mission-led approach, and adopt business models that properly address strong sustainability objectives. For CRESC, the social franchise also implies the need for changes in procurement and employment practices: “In this new world, firms will need to pay living wages, recruit and train locally, source regionally and nationally as they anchor themselves in communities”. To achieve this, CRESC argues that local and regional government need to be empowered and skilled as appropriate to use micro-level knowledge to develop context-specific understandings of the foundational economy and to share intelligence about how to deal with common problems.

- 30 In addition to systematic work with anchor institutions and development of foundational economies, enhanced city-based devolution would provide opportunity to implement a range of local initiatives to help develop and spread co-operative models. As argued by the Co-operative Party, these could include, for example, setting up: a local ‘co-operative commission’ to find ways of expanding the sector; a regional forum to share best practice on co-operative development and support; and a co-operative investment fund to provide ‘patient’ capital⁴⁸. Other policies could include encouraging anchor institutions to procure goods and services from local co-operatives and social enterprises, and encouraging Local Enterprise Partnerships to appoint representatives who can report on efforts to stimulate the co-operative sector.
- 31 There are numerous examples of community enterprises across a variety of sectors, including community energy, food, housing and transport. A recent review for the Friends Provident Foundation, highlights the importance of assets that are owned by and work for local communities, and provides a range of examples from across the UK of the way in which this is being done, including local food production and supply, digital manufacturing, recycling, bakeries, cafes and cultural venues⁴⁹. To move forward with the creation of more community-led enterprises, the review argues that places need to take greater advantage of the principles and provisions of the Localism Act 2011, and that this needs to be done on a partnership basis, linking community provision to wider agendas around public service reform, with an enabling role for local authorities. Asset mapping is often an important first step because it: makes community assets more visible; helps stimulate stakeholders to think about enterprise development; and creates new opportunities for partnership⁵⁰.

⁴⁸ Scott J and Fortune J, ‘By Us, For Us: a Co-operative Party Agenda for Enhanced City and County Regions’, 2016.

⁴⁹ Goff C, ‘Creating Good City Economies in the UK’, Friends Provident Foundation, 2016, p35.

⁵⁰ Sharp D, ‘Sharing Cities: An Asset Based Approach to the Urban Commons’, in Ramos J M, Ed, ‘The City as Commons: A Policy Reader’, 2016, <https://cdn5-blog.p2pfoundation.net/wp-content/uploads/city-as-commons.pdf>.

- 32 It will be essential to the success of regional and local economic strategies that there is adequate access to finance. We agree with those that argue for wider national initiatives to enable the creation of parallel financial systems, including a strong network of local banks and credit unions⁵¹. An active policy to enhance the diversity of the British banking system could make a substantive contribution to the achievement of a challenge-led industrial strategy. As the New Economic Foundation (NEF) and Co-operative Party point out, Government could enable the development of purpose-led, local banks on the model of German *Sparkassen* which operate only within specific geographical boundaries⁵². It could also provide incentives and legislative guarantees to enable the creation and expansion of local cooperative banks, credit unions, or community development financial institutions. As NEF shows, there are innumerable international examples which can serve as a blueprint for designing a system that works in the UK⁵³.
- 33 Finally, an issue that needs addressing is how to counter the way in which transnational companies tend to pursue their own strategic objectives, with limited loyalty and responsibilities to place (including ultimately the threat of relocation). There are a range of potentially helpful actions and initiatives that could be taken forward. At the national level, these concerns could in part be addressed through measures to encourage the development of mission-led perspectives and strong sustainability business models, and through wider public interest representation in corporate governance. At the local level, actions could include seeking to actively involve those companies in local economic development partnership arrangements, encouraging a more ‘foundational’ perspective, and encouraging the development of more localised supply chains⁵⁴. Taken together, these steps could encourage a greater commitment to place.

Technological and Socio-Technical Innovation

- 34 Government has a key role to play in creating and sustaining a dynamic and vibrant innovation system in order to help address the fundamental eco-system and social challenges outlined above. Development of an industrial strategy provides opportunity to do just this by: setting clear strategic priorities for innovation; highlighting the breadth and focus of innovation required; ensuring the nature of support is appropriate to the breadth of sources of innovation; and committing to deliver the scale of support commensurate with the magnitude of the challenges.
- 35 In our view, strategic **priorities** should be articulated that directly address fundamental eco-system and social challenges. We have added an emphasis here because, contrary to current practices, we think that these strategic priorities should

⁵¹ See, for example, SPERI and NEF written evidence to the Business, Energy and Industrial Strategy Committee Inquiry into Industrial Strategy, 2016.

⁵² See the case study and proposals in Scott J and Fortune J, ‘By Us, For Us: a Co-operative Party Agenda for Enhanced City and County Regions’, 2016.

⁵³ Prieg L and Greenham, T, ‘Stakeholder Banks: Benefits of Banking Diversity’, New Economics Foundation, 2012.

⁵⁴ See, for example, the arguments in Bailey D et al, ‘An Industrial Strategy for UK Cities’, Chapter, April 2015 DOI: 10.1093/acprof:oso/9780198706205.003.0014.

have primacy over criteria relating to economic growth or productivity (see further comments below about selective growth and productivity outcomes from the approaches advocated in this submission). This primacy is necessary to overcome what has been described as the ‘paradox of innovation’⁵⁵. The paradox is that innovation is partly responsible for current unsustainable trajectories, but also part of the solution. Ensuring the primacy of strategic priorities for innovation that seek to enable genuinely sustainable economic transformation is a key way of breaking out of the ‘lock-in’ to damaging innovation trajectories. We also agree with Unilever that the planetary boundary concept, and the associated framing of the need to operate within a safe operating space, provides a “context for transformative innovation”⁵⁶. It is important that the primacy of challenge-led strategic objectives infuses all elements of the innovation system to ensure coherence and direction. It would also require review and some revision of Innovate UK’s new four year strategy, which will be to focus on strategic high-growth sector opportunities⁵⁷.

36 We think that the scope of the innovation system needs expanding so that it is appropriate to the scale and nature of the challenges. This means ensuring a focus on:

- innovation for strong sustainability, including in green, circular and localised production and manufacturing economies (see below), embracing and going beyond a transition to a low carbon and resource efficient economy and building on the approach to ‘green innovation’ advanced by the TUC⁵⁸;
- developing policy mixes that help break out from ‘lock-ins’ to damaging and unsustainable industrial practices, thereby creating openings for speedier take-off and growth of innovations for strong sustainability⁵⁹, and recognising that support will be needed for workers and communities associated with industries that are unable to transform or diversify⁶⁰; and

⁵⁵ Westley F et al, ‘Tipping Toward Sustainability: Emerging Pathways of Transformation’, *Ambio, a Journal of the Human Environment* · November 2011

⁵⁶ Sim S et al, ‘The Role of Science in Shaping Sustainable Business: Unilever Case Study’, in R. Clift, A. Druckman (eds.), ‘Taking Stock of Industrial Ecology’, 2016.

⁵⁷ Innovate UK, written evidence to Business, Energy and Industrial Strategy Committee inquiry into Industrial Strategy, 2016, <http://www.parliament.uk/business/committees/committees-a-z/commons-select/business-innovation-and-skills/inquiries/parliament-2015/industrial-strategy-16-17/>.

⁵⁸ McDowall W and Ekins P, ‘Green Innovation: Industrial Policy for a Low Carbon Future’, TUC Economic Report Series 2014.

⁵⁹ See Kivimaa P and Kern F, ‘Creative Destruction or Mere Niche Support? Innovation Policy Mixes for Sustainability Transitions’, *Research Policy* 45, 2016, for case study analysis and proposals for the sorts of ‘regime destabilisation’ policies that are being, and could be, pursued. These include: control policies, such as pollution taxes; changes in regime rules, including legislative and regulatory change; reducing support for unsustainable technologies, for example removing subsidies; and a better balance in key actors in important roles, for example in policy advisory councils.

⁶⁰ TUC and Greenpeace, ‘Green Collar Nation: A Just Transition to a Low Carbon Economy’, TUC Economic Report Series 2015.

- technological and socio-technical innovation, recognising that the innovation system should embrace the needs of SMEs⁶¹, and of community-driven or ‘grassroots’ initiatives (for example in ‘peer to peer’, ‘solidarity’ and ‘sharing’ economies⁶², and in community energy, community food or digital fabrication), in addition to those of larger businesses.

- 37 The inclusion of community-driven or grassroots socio-technical innovation within the scope of the UK’s innovation system would present great opportunities, but is not without its challenges. The opportunities arise from the diversity, energy, creativity and place-based nature of these initiatives and their potential to contribute to transformative change. The challenges have been argued to arise because many of these initiatives have been concerned to ‘stretch and transform’ rather than ‘fit and conform’, and have been wary of being hi-jacked or co-opted⁶³. We think that these challenges are real, but could be significantly reduced if industrial strategy and associated policies addressed the totality of the proposals in this submission, and if governance and management approaches within the innovation system were sufficiently sensitive, explorative, supportive, adaptive and focused on building trust. There is a helpful research literature that looks at how to shield, nurture and empower grassroots initiatives⁶⁴, and at strategies to enable such initiatives to scale out, up and deep⁶⁵. It should not, however, be automatically assumed that all grassroots initiatives wish to scale out, up or deep – whether this is the case and, if so, appropriate strategies to achieve this, need to be developed through discussion and dialogue⁶⁶.
- 38 The concept of ‘design global – manufacture local’ provides a good example of socio-technical innovation. For advocates, it describes the potential of the emerging globally distributed knowledge and design commons to play a major part in facilitating localized production and manufacture of goods⁶⁷. This can take place when easily

⁶¹ See in particular arguments for a stronger focus on the needs of SMEs in New Economics Foundation and UCL written evidence to the Business, Energy and Industrial Strategy Committee inquiry into Industrial Strategy, 2016.

⁶² See the social innovation case studies in solidarity and sharing economies in Avelino F et al, ‘Transitions Towards New Economies? A Transformative Social Innovation Perspective’, Transit Working Paper No 3, September 2015.

⁶³ See, for example, Smith A and Seyfang G, ‘Constructing Grassroots Innovations for Sustainability’, *Global Environmental Change* 23, 2013, and Avelino F et al, ‘Transitions Towards New Economies? A Transformative Social Innovation Perspective’, Transit Working Paper No 3, 2015.

⁶⁴ Smith A and Raven R, ‘What is Protective Space? Reconsidering Niches in Transitions to Sustainability’, *Research Policy* 41, 2012

⁶⁵ See, for example: Moore M L et al, ‘Scaling Out, Scaling Up, Scaling Deep: Strategies of Non-Profits in Advancing Systemic Social Innovation’, *The Journal of Corporate Citizenship*, Issue 58, June 2015; Moore M L and Westley F R, ‘Public Sector Policy and Strategies for Facilitating Social Innovation’, Horizons Policy Research Initiative; and Raven R et al, ‘Transitions and Strategic Niche Management: Towards a Competence Kit for Practitioners’, *Int. J. Technology Management*, Vol. 51, No. 1, 2010.

⁶⁶ As argued by Smith A and Seyfang G, ‘Constructing Grassroots Innovations for Sustainability’, *Global Environmental Change* 23, 2013. See also Hargreaves T et al, ‘Grassroots Innovations in Community Energy: the Role of Intermediaries in Niche Development’, *Global Environmental Change* 23, 2013, for a helpful UK case study.

⁶⁷ Ramos J, ‘Cosmo-Localism and Urban Commoning’, in Ramos J M, Ed, ‘The City as Commons: A Policy Reader’, 2016, <https://cdn5-blog.p2pfoundation.net/wp-content/uploads/city-as-commons.pdf>.

accessible designs are paired with localized and distributed production capabilities using breakthrough technologies, both virtual and physical, that facilitate local manufacture. Examples include the Global Village Construction Set and Fab City⁶⁸. Researchers highlight that such initiatives attempt to implement alternative ways of innovating, manufacturing and consuming that rely on more democratic and inclusive processes⁶⁹. They also point out that sustainability goals are not inherent in these sorts of initiatives and need to be made explicit⁷⁰, and that circular economy principles also need to be embedded in emerging manufacturing systems before negative practices become entrenched⁷¹. A strongly challenge-led, place-based, industrial strategy, and supportive socio-technical innovation system, could help ensure that these initiatives address these issues and flourish.

39 In addition to the nature of the support required for grassroots socio-technical innovation described above, we wish to draw attention to some of the broader needs of the innovation system⁷², including:

- the need to create healthy, symbiotic relationships between businesses, employees, universities, public bodies and civic society, including interactions and knowledge flows between these actors across the whole innovation chain⁷³;
 - the need for decentralised innovation leadership and a strong network able to provide continuity and long-term perspectives, building on and extending Innovate UK's regional approach and consistent with the city-based devolution and localisation proposed above;
 - the need to address barriers to innovation, including review of the extent to which current 'intellectual property' regimes prevent others from innovating⁷⁴;
 - the need to nurture potentially transformative socio-technical innovation in a spirit of experiment and discovery, using flexible and transparent processes, continuous and systematic learning, and maintaining options for adaptive action⁷⁵;
- and

⁶⁸ See Ramos J above.

⁶⁹ Hielscher S and Smith A, 'Community-Based Digital Fabrication Workshops: a Review of the Research Literature', SPRU Working Paper Series, No 8, May 2014.

⁷⁰ Fleischmann K et al, 'Making Things in Fab Labs: a Case Study on Sustainability and Co-creation', Digital Creativity, DOI:10.1080/14626268.2015.1135809, 2016.

⁷¹ Despeisse M et al, 'Unlocking Value for a Circular Economy through 3D Printing: A Research Agenda', Technological Forecasting and Social Change, 2016.

⁷² See also the work of the new Transformative Innovation Policy Consortium which is developing the concept of a 'third frame' of innovation for transformative change, <http://www.johanschot.com/transformative-innovation/> and Schot J and Steinmueller W E, 'Framing Innovation Policy for Transformative Change: Innovation Policy 3.0', Science Policy Research Unit, October 2016.

⁷³ Science Policy Research Unit, Sussex University, written evidence to the Business, Energy and Industrial Strategy Committee Inquiry into Industrial Strategy, 2016.

⁷⁴ See, for example, Standing G, 'The Corruption of Capitalism: Why Rentiers Thrive and Work Does Not Pay', 2016. Standing argues for elimination of the patent system for technologies developed at public expense, and radical scaling back of the duration other patents are in effect combined with compulsory licensing.

⁷⁵ See, for example, the emphasis in Lütkenhorst W et al, 'Green Industrial Policy: Manufacturing Transformation under Uncertainty', German Development Institute, Discussion Paper 28, 2014.

- the need to review, identify and agree the scale of funding that would be commensurate with the magnitude of the challenges⁷⁶.

Implications for Achievement of Wider Objectives

40 In addition to the sustainability objective that provides a major focus for this submission, the consultation documentation sets out objectives for:

- Jobs – that should be decent, well-paid, secure and open to all
- Productivity – that should be high to enable the UK to remain competitive on the world stage and create value to raise wages and living standards
- Regional balance – to ensure vibrant local economies and flourishing community life
- Sectoral balance – to ensure balance, strength, resilience and stability across a variety of wealth-creating sectors.

This section comments on the achievement of these wider objectives.

Jobs

41 There are major challenges associated with achievement of the objective on jobs, particularly arising from the pace and nature of technological change (digitisation, artificial intelligence and automation) and the growth of models of employment based on casualization, low wages and uncertainty. In the light of these challenges, we welcome the setting up of the Future of Work Commission by the Deputy Leader of the Labour Party⁷⁷. We think that the Commission should examine the argument that the pursuit of ever increasing labour productivity is at the heart of the problem, and that strategies around reduced working hours per employee and shifts towards more employment rich sectors could be part of the solution⁷⁸. We have already argued that the spread of co-operative models of ownership and control could start to address issues around precarious jobs. It may also be that technological innovation could be focused on findings ways to augment and enhance work experience in some sectors. Clearly programmes for skills development and re-training will be key, and consideration of initiatives around universal basic income look increasingly necessary. Overall, it will be important to identify the political choices that can impact positively on the future of work and, as far is possible, address them in the development of industrial strategy and associated policies.

42 We also think that the approaches to economic transformation advocated in this submission will bring potential for a significant and beneficial impact on the number and quality of jobs. That potential should be deliberately addressed. Major

⁷⁶ This review should take into account Innovate UK experience, including its comment that far more companies pass its criteria for funding than it is able to invest in, see its written evidence to the Business, Energy and Industrial Strategy Committee inquiry into Industrial Strategy, 2016.

⁷⁷ See <http://www.futureofworkcommission.com/>, and Watson T, 'Automation and the Future of Work' in 'In Our Interests: Building an Economy for All', Co-operative Party, 2017.

⁷⁸ See, for example, the discussion about 'work as participation' in Chapter 8 in Jackson T, 'Prosperity Without Growth: Foundations for the Economy of Tomorrow', Second Edition, Routledge 2017.

investments in green and circular economies, shifts to mission-led and strong sustainable business models, socio-technical innovation and local economic development could all contribute significantly to job creation⁷⁹. Alongside corporate governance reform, widening business ownership and spread of co-operative models, these developments could also help to ensure a greater availability of jobs that are more meaningful and secure, and better paid. However, the scale and nature of the systemic changes that are required will also bring major challenges, particularly for industries that must undergo substantive change to survive. As argued above, support will be needed for workers and communities associated with these industries, and even more so for those associated with those industries that are unable to transform or diversify. It will be important to ensure that ‘just transitions’ take place.

Productivity and Trade

- 43 Conventional wisdom is that high investment and innovation are root causes of higher productivity. To an extent and for a period, it is likely that the high levels of investment in, and focus on challenge-led innovation for, green and circular economies will generate productivity gains, particularly arising from optimised resource use and the development of renewable energies. However, other vital investment in ecosystem protection is unlikely to do so, and it is unclear what impact major shifts to mission-led businesses and localised economies will have on productivity. Overall, we cannot know for sure whether the economic transformations proposed in this submission will lead to higher productivity, or indeed whether this is in the longer-term desirable. These questions need further examination⁸⁰, taking into account the issues around increasing labour productivity raised above under ‘jobs’.
- 44 Nonetheless, we think it reasonable to suggest that an economy transforming to meet major ecosystem challenges will be better placed to respond to growing world demand for the technologies and practices associated with strong sustainability⁸¹. In particular, a dynamic and vibrant innovation system that focuses on green, circular and localised production and manufacturing technologies, offers opportunities for market leadership and international trade. As has been argued in a TUC report, countries that capture a position as a leading innovation hub for a core technology are likely to continue to reap high value-added returns as the sector develops: “the nature of global competition for innovation is that once an economy has achieved a strong position of leadership during the market expansion phase, it is difficult for others to catch-up”⁸². Alongside a focus on exports related to green, circular and localised

⁷⁹ See, for example, initial estimates for job creation in TUC and Greenpeace, ‘Green Collar Nation: A Just Transition to a Low Carbon Economy’, Economic Report Series 2015, and Green Alliance, ‘Employment and the Circular Economy: Job Creation in a More Resource Efficient Britain’, January 2015.

⁸⁰ See, for example, the discussion about productivity in Ch 9 of Jackson T, ‘Prosperity Without Growth: Foundations for the Economy of Tomorrow’, Second Edition, Routledge 2017.

⁸¹ Recent research estimates that worldwide business opportunities related to strong sustainability in cities could be worth over \$3.7 trillion annually for the private sector by 2030. More than half of the value of the opportunities is estimated to be located in developing countries. See Alpha Beta, ‘Valuing the SDG Prize in Cities: Unlocking Business Opportunities to Accelerate Sustainable and Inclusive Growth’, B&SDC, November 2016.

⁸² McDowall W and Ekins P, ‘Green Innovation: Industrial Policy for a Low Carbon Future’, TUC Economic Report Series 2014.

production and manufacturing technologies and know how, we think that there is a strong case for looking to maximise those markets in the UK that can be domesticized and localised, particularly relating to energy and food production and supply. This would be consistent with a strong sustainability approach and place-based strategies.

- 45 We also agree with NEF that trade policy and industrial strategies are closely intertwined and that there needs to be a synergy⁸³. NEF points out that successive governments have championed trade agreements that heavily constrain national governments in shaping social and economic outcomes and have opposed proposals to use trade talks to actively drive social and environmental standards upwards. As NEF argues, the future of the UK's trade arrangements are not yet clear, but Government should drive trade policy in the same direction as the overall objectives for industrial strategy – particularly championing reforms in the international trade system to promote and enable strong sustainability.

Regional Balance

- 46 We have proposed above that industrial strategy should have a strong place-based emphasis, and that city-based devolution and localisation should be seen as a linked and complementary policy. We believe that the approach to city-based devolution and localisation proposed in this submission will help ensure vibrant local economies and flourishing community life, and contribute to achieving regional balance. As argued by NEF, it will also be important for Government to ensure that all regions are on a level-playing field in terms of basic infrastructure, such as transport links and networks, as well as health, skills and education⁸⁴. Against a backdrop of empowering and enabling places to respond flexibly to their specific challenges and opportunities, there may also be a role for Government in establishing mechanisms to ensure that regions and local areas develop sectors and economic activities that are, as far as practicable, complementary.

Sectoral Balance

- 47 We have argued that green and circular economy thinking, and strong sustainability approaches, need to be applied as far as is possible across all sectors, and that the scale and nature of the systemic changes that are required will bring major challenges, particularly for industries that must undergo substantive change to survive. We think it inevitable that 'winners and losers' will emerge from economic transformation, and have highlighted the importance of Government support to ensure 'just transitions'. Ultimately, we think that the balance between sectors will look different to that of today, but that the wealth creating sectors that develop and flourish will be stronger, stable and more resilient.

⁸³ NEF, written evidence to the Business, Energy and Industrial Strategy Committee Inquiry into Industrial Strategy, 2016.

⁸⁴ NEF, as above.

Economic Growth

48 It is clear that the unqualified neoliberal pursuit of economic growth is unsustainable and poses a major threat to living within a 'safe and just operating space' (paras 4-10 above). We do not believe that the pursuit of economic growth as an end in itself should be the primary goal of industrial strategy and economic policies⁸⁵. However, as should be clear from this submission, many forms of growth – in green and circular economies, mission-led businesses, community enterprises, greater equality and well-being – would be the outcome of the sort of strongly challenge-led industrial strategy and associated policies advocated here. There are, nonetheless, serious issues at the heart of debates about whether, overall, 'sustainable growth' is possible⁸⁶, or whether we should be embracing and moving towards 'post-growth' or 'de-growth' economies. One of the central issues is the question of whether it is possible to decouple, in absolute terms, resource use from economic growth. We think that this issue requires close examination (and that this should be undertaken alongside further work on the questions raised above about productivity). A good starting point is to consider the reasoning developed by Jackson on the 'myth of decoupling'⁸⁷. Perhaps paradoxically, the challenge here is whether green and circular economies can be sufficiently transformative and grow sufficiently fast to enable us to live within resource limits and planetary boundaries. For Jackson, this is highly unlikely without also addressing other aspects of the way in which we live, including the social logic that locks us into an 'iron cage of consumerism'. We think that these broader issues should also be discussed more widely, including ways of countering a 'culture of consumerism'⁸⁸.

⁸⁵ We welcome the growing recognition of the limitations of GDP/GVA as a measure of choice and calls for a wider basket of measures. See, for example, RSA Inclusive Growth Commission, 'Emerging Findings', 2016, and Jones A et al, 'Indicators for Sustainable Prosperity? Challenges and Potential for Indicator Use in Political Processes', CUSP Working Paper No. 3, October 2016.

⁸⁶ See, for example, the thinking on alternative growth models in Hay C and Payne T, 'Civil Capitalism', SPERI Paper No 12, May 2014, and Berry C, 'The Resurrected Right and Disoriented Left: Growth Model Failure and the Nascent Politics of a Transformative Narrative', SPERI Paper No 27, February 2016.

⁸⁷ Jackson T, Chapter 5 in 'Prosperity Without Growth: Foundations for the Economy of Tomorrow', Second Edition, Routledge 2017

⁸⁸ See, for example, Hurth V et al, 'Reforming Marketing for Sustainability: Towards a Framework for Evolved Marketing', Friends of the Earth Big Ideas Project, and Jackson T, Chapter 6, as above.