



COVERSHEET

Minister	Hon David Parker	Portfolio	Economic Development
Title of Cabinet paper	Industry Policy	Date to be published	12 July 2019

List of documents that have been proactively released

Date	Title	Author
18/02/2019	<i>Refocusing our approach to Industry Policy</i>	<i>Office of the Minister for Economic Development</i>
18/02/2019	<i>Cabinet Minute of Decision: Refocusing the Approach to Industry Policy</i>	<i>Cabinet Office</i>
29/05/2019	<i>Next steps on Industry Strategy</i>	<i>Office of the Minister for Economic Development</i>
29/05/2019	<i>Cabinet Economic Development Committee Minute of Decision: Next Steps on Industry Strategy</i>	<i>Cabinet Office</i>

Information redacted

NO

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In Confidence

Office of the Minister for Economic Development

Chair, Cabinet Development Committee

REFOCUSING OUR APPROACH TO INDUSTRY POLICY

Proposal

1. This paper proposes a refocus of our approach to industry policy, in support of our Economic Strategy. It outlines a set of guiding principles for a new way of engaging more strategically across portfolios with key sectors of the economy, to inform a more cohesive and co-ordinated approach to industry policy for the future.

Executive Summary

2. The government has set its Economic Strategy to drive for a more productive, sustainable and inclusive New Zealand. The key sectors within our economy need to be performing at their full potential to realise this vision, and both government and industry play important roles.
3. Internationally there is a trend towards more active industry policy with government interventions aimed at affecting the economic structure of the economy. Governments are taking a more explicit approach to partnering with key sectors of the economy and focusing key enablers to realise stronger economic outcomes.
4. In the past, industry policy was taken to mean intrusive governments, picking national champions and hampering markets. However, since the Global Financial Crisis (GFC), the focus of industry policy has shifted to reflect the fact that governments need to make strategic choices in support of their broader economic, social and environmental objectives. This 'new' industry policy is focused on development of eco-systems, creating networks, developing institutions and aligning strategic priorities using a robust evidence base and the development of a range of tools such as industry roadmaps. These are essential to support, guide and align the actions of all players – industry, science and academia, Iwi, local and central government agencies, investors, and unions.
5. In New Zealand, our prevailing approach to industry policy in recent years has been characterised by a number of different interventions, but with less emphasis on how they work collectively. Many existing interventions seek to support economic development or specific sectors, but the cohesiveness and overall strategic direction is less clear. There is limited confidence (among Ministers, officials and the private sector) that these initiatives are working consistently together and pushing in the same direction.

6. In order to build that cohesion and confidence, I propose that we implement an explicit industry policy and improve the effectiveness of our policies and interventions by:
 - a. taking a partnership-led approach, developing solutions with stakeholders
 - b. building and using a strong evidence base to guide our focus and interventions, including robust evaluation and monitoring
 - c. using specific sector strategies/roadmaps
 - d. leveraging international connections
 - e. providing clear and consistent signals from the Government on a proposed course of action to realise economic and sustainable growth, (as well as improved wellbeing for New Zealanders).
7. There are a number of related work areas that are highly relevant to our industry policy including, for example, the Future of Work; Just Transitions; the 'Trade for All' agenda; the Green Investment Fund; the Tax Working Group; the Provincial Growth Fund; the introduction of the research and development tax credit; the new Research, Science and Innovation (RS&I) strategy; the Digital Economy work programme, the Innovative Partnerships programme, and reform of the Resource Management Act. We must ensure that these work programmes work together coherently as a mutually reinforcing package as they are implemented across regions, sectors and communities.
8. The criteria guiding our industry policy include: the importance of the sector to our transition to a highly productive, low emissions future; whether there are opportunities to move from value to volume and/or to diversify; and where New Zealand has some competitive advantage upon which to draw.
9. Based on our assessment of these criteria, I propose we focus our efforts on food and beverage, manufacturing, renewable energy, agritech, digital technologies, aerospace and health technology sectors. The Innovative Partnerships Programme and the Research, Science and Innovation strategy work led by Minister Woods has also identified similar sectors as priorities. We will need to identify core areas of focus within these broad sectors to ensure our interventions realise each sectors potential.
10. I will report back to this Committee by April 2019 on how we are embedding the principles identified in paragraph 6 above with respect to these seven sectors, and the core areas of focus within each of these broad sectors, working closely with the Research, Science and Innovation, Government Digital Services, Energy and Resources, Climate Change, Just Transitions, Regional Economic Development, Transport, Health and Primary Industries portfolios.

Background

11. We have recently confirmed our Economic Strategy for New Zealand to build a more productive, sustainable and inclusive economy. The strategy is designed to secure and improve the well-being of all New Zealanders. Our economy enjoys many strengths, and we have a good platform for future growth.

12. But for all these strengths, we have challenges too, both domestically and internationally. At home these challenges are:
 - a. productivity and low productivity growth by international standards
 - b. much of our recent growth has been input-driven (as opposed to driven by improved productivity) and has stretched environmental and social limits
 - c. even though our economy has grown overall, not all New Zealanders are sharing in that growth and some New Zealanders are being left behind
 - d. there is a need to shift towards productive investment and away from an excessive reliance on speculation and immigration.
13. As identified in Paul Conway's recent paper for the Productivity Commission *Can the Kiwi Fly? Achieving Productivity Lift-off in New Zealand*, New Zealand's key economic challenge is to move from a growth strategy based on labour absorption to one in which productivity plays a much bigger role.
14. The causes of New Zealand's poor long-term productivity performance are now well understood:
 - a. technology diffusion and resource reallocation do not work as well as they could in New Zealand
 - b. many New Zealand firms are not well connected internationally
 - c. domestic markets are often small and in some industries competitive pressures are lower than in larger economies
 - d. the economy is capital shallow, low capital investment per employee has been made worse through high population growth. The cost of capital is also higher than in comparable countries while labour is relatively cheap
 - e. most New Zealand firms have been slow to invest in knowledge-based assets (such as R&D, management capability, ICT).
15. Aspects of this story are self-reinforcing. For example, New Zealand firms are small because they operate in small and insular markets. So they struggle to learn from global frontier firms and have limited revenues to invest in capital, including knowledge based assets. In turn, this restricts productivity growth, making it more difficult for these firms to connect into larger international markets.
16. Being a small and distant country made up of small firms and small markets changes the judgement about where government intervention may reduce transactions costs and/or increase welfare. This might see government moving into areas that the market might deal with effectively in a large economy, examples being providing information; funding support for cluster development; support for world class innovation infrastructure such as networks to facilitate technology diffusion, assistance with market development and developing supporting capabilities in industry ecosystems.

17. This makes the argument for a well-designed, evidence-based active industry policy more compelling in the New Zealand context than it might be in an economy closer to large markets, particularly given that globally we see the challenges of:
 - a. discontent about growing inequality
 - b. a rising tide of protectionism
 - c. digital disruption (in particular in some of our traditional industries) which is creating uncertainty for those whose jobs are disrupted
 - d. mitigating and adapting to the impacts of climate change.
18. In the face of all these challenges, New Zealand needs to adjust its course. Four areas have been identified where we think greater focus could be given include:
 - a. **Cross-cutting microeconomic policy settings:** focusing on “rules of the game” regulatory settings which influence the behaviour and investment decisions of firms (eg settings that impact on firms’ uptake of productivity-enhancing innovation such as the degree of competitive pressure in markets).
 - b. **Moving from volume to value:** focusing on sector and firm-level initiatives that will support and incentivise businesses to adopt new technologies, shift into higher value, carry out more productive and more knowledge intensive activities and diversify into new areas.
 - c. **Productive investment:** removing distortions in the tax system to incentivise productive investment, such as business investment in fixed capital and deepening shallow capital markets – particularly early-stage capital markets.
 - d. **Active labour market policies:** policies that support the reskilling, upskilling and redeploying of workers affected by change. Large businesses are increasingly recognising a duty to reskill existing workers and there may be a role for government to work with businesses to support this, while ensuring that we help design solutions for small and medium enterprises with limited capacity or capability to reskill workers themselves.
19. In my Economic Development portfolio I am particularly focused on progressing two of these areas: moving from volume to value; and productive investment. This paper focuses on the former.
20. I have a companion paper on productive investment *Deepening New Zealand’s Early Stage Capital Markets* which details how we can further support sectors identified in this paper (such as agritech) through early stage capital market development.

To make a difference to our economic performance, we need to refocus our approach

21. Post-GFC there has been a trend towards more active industry policy across many developed economies and emerging market economies. South Korea, Japan, the Netherlands, Singapore, China, Brazil and India are just a few of the countries where the government has taken a more explicit approach to partnering with key sectors of the economy to realise stronger economic outcomes.

22. In the past, industry policy was taken to mean intrusive governments, picking national champions and hampering markets. However, post-GFC, the focus of industry policy has shifted to reflect the fact that governments need to make strategic choices in support of their broader economic, social and environmental objectives. This is particularly the case in small economies, which by their nature tend to be specialised economies. This 'new' industry policy is focused on developing eco-systems, creating networks, developing institutions and aligning strategic priorities using a robust evidence base and developing a range of tools such as industry roadmaps. These are essential to support, guide and align the actions of all players – industry, science and academia, Iwi, local and central government agencies, and investors.
23. Here in New Zealand, our prevailing approach to industry policy in recent years has been characterised by a number of different interventions, but with less emphasis on how they work collectively to achieve our broader economic, social and environmental goals. Many existing interventions seek to support economic development or a particular sector, but the cohesiveness and overall strategic direction is less clear. There is limited confidence (among Ministers, officials and the private sector) that these initiatives are working consistently together and pushing in the same direction.
24. A targeted look at the challenges and opportunities in the key sectors of the economy is now needed. This is to ensure our efforts are aligned and focused, so that government is supporting our regions, businesses and workers to increase their productivity and wellbeing.

I propose the following guiding principles to inform our new approach

25. I propose that we develop and implement an explicit industry policy, to improve the effectiveness of our policies and interventions. This industry policy will be shaped by a set of guiding principles, strategic priorities and criteria for selecting areas of strategic importance.
26. Our industry policy will be guided by the following set of core principles:
 - a. **Taking a partnership-led approach** to identify key sector and firm-level initiatives. We will work with willing industry partners to co-create a plan for joint action. This ensures that we define problems and opportunities collectively from the outset. A recent example is the work under the Future of Work Tripartite Forum on Industry 4.0 which is being developed in concert with the Manufacturers' Network. Other partnerships approaches are also well underway (e.g. Just Transitions work with Taranaki, and the Innovative Partnerships programme) and we can learn or extend from these as appropriate.
 - b. **Building a strong evidence base to guide our focus and interventions, including robust evaluation and monitoring.** To be effective (and to guard against Government failure or stakeholder capture) the policy will need to be grounded in a strong and granular evidence base. This will require a capability to systematically gather, assess and process the information that is relevant to the policy debate and development, such as a solid understanding of the productivity, sustainability and inclusiveness challenges, and (for instance) the different modes of innovation and capability requirements in different industries.

- c. **Using specific sector strategies/roadmaps** to guide investments and interventions. Different sectors and segments within each sector have different needs depending on factors such as the maturity of the sector, sectoral capabilities, the markets in which they operate, the regional/urban environment, their broader role in the New Zealand economy, and policy and market drivers. Our approach will not be one size fits all. A recent example here is the intent of establishing the Primary Sector Council.
- d. **Leveraging international connections**, including free trade agreements and softer economic diplomacy, to ensure the flow of goods and services, capital, people and ideas are consistent with the industry achieving its productivity potential. Recent examples include the CPTPP, the Small Economies Initiative, the Hydrogen agreement with Japan, and the agreement with Israel on Cooperation in Technological Innovation, Research and Development.
- e. **Providing clear and consistent signals from the Government** on where it sees its role. We will outline our proposed course of action to realise productive, inclusive and sustainable growth that lifts the wellbeing of New Zealanders. This will include who is responsible for what, noting some of our signals may also seek to challenge the status quo in certain areas.

27. I propose three key strategic priorities for our industry policy (Annex 1 has more detail):

<p>Moving from volume to value in our existing areas of strength, so that businesses can continue to grow value while limiting their impact on the environment.</p>	<p>Leveraging opportunities adjacent to existing key sectors, both for export and to enable higher-value land use domestically.</p>	<p>Backing the industries of the future (emerging sectors), with support for science and research and development aligned with a responsive regulatory regime to position New Zealand as a hub for world-leading innovation, linked into global value chains.</p>
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- 28. All three of the above pillars will be advanced through initiatives to facilitate the diffusion and adoption of existing and new technologies (broadly defined) such as ICT. Uptake of these by the long-tale of firms with low levels of productivity will greatly enhance the well-being of New Zealanders.
- 29. The Government’s objectives for each of these strategic priorities is different. Where we are looking to move from volume to value, government’s efforts should be about driving sustainable growth and productivity, and helping prepare for technological disruption.
- 30. In adjacent sectors, government must ensure there is a high level of co-ordination within the relevant eco-system to maximise the impact of government’s settings and ensure opportunities for growth can be pursued by the private sector.
- 31. To foster the sectors of the future, government must be nimble, well connected to international trends and market forces, and highly adaptive to respond accordingly.

Where should we focus our efforts?

32. Given the context outlined above, I have used the following criteria to guide how we select our areas of focus:
- the sector is important for New Zealand's transition to a highly productive, low emissions future
 - there are opportunities to move from volume to value and/or to diversify into adjacent areas
 - New Zealand has some competitive advantage upon which to draw
 - we are already developing strategies.
33. Based on these criteria, I propose that we direct our economic development agencies to engage their collective efforts on a set of seven sectors.

Sector	Objectives of government's engagement
Food and beverage	The sector provides significant opportunities for growth and diversification, especially in the regions. It is also potentially subject to major disruptions in the future (e.g. through meat and dairy replacements).
Manufacturing	To equip manufacturers with skills and technologies needed to remain internationally competitive (such as Industry 4.0).
Renewable Energy	To support New Zealand's security of supply and the transition to an all-sustainable low emissions energy system.
Agritech	To create value for New Zealand from: supporting increased technology adoption by New Zealand farmers (e.g. to decrease inputs while improving productivity and environmental outcomes); development and commercialisation of new technologies to support a low emissions sustainable agricultural future; and exporting technologies that will transform the global agriculture system.
Digital technologies	To develop digital technology skills and increase the uptake of digital technologies across the economy to drive productivity, particularly in lagging firms. Increased local demand will drive increased numbers of start-ups and more scope for some firms to scale-up in the New Zealand market, resulting in increased capacity to export and expand off-shore.
Aerospace	Develop a space sector and autonomous air transport sector that has a meaningful impact on New Zealand's economy.
Health Technologies	To support New Zealanders' wellbeing and increase export of transformational technologies.

34. Food and beverage is the major industry where New Zealand has a significant comparative advantage and underpins most regional economies. Manufacturing more generally is a major employer, and produces many essential goods from building products to high tech machinery. Importantly it plays a critical role in tackling societal challenges, through developing products that reduce energy and resource consumption and limiting greenhouse gas emissions. Agritech, for instance, will play a key role in this regard. Digital technologies can drive productivity and reduce compliance costs, but will also play a key role in a sustainable economy through, for example, using the Internet of Things to support better management of land and infrastructure. Aerospace and health technologies¹ are both areas where entrepreneurial activity is responding to international trends and where New Zealand has demonstrated success and can be major industries for New Zealand in the future.
35. There are significant cross-overs between the sectors identified above, and investment in analysis to understand value chains and the interplay between upstream and downstream industries will be critical. We will need to identify core areas of focus within these broad sectors to ensure our interventions realise each sectors potential.

Enablers across the economy will play an important role, and we have already put in place initiatives that are highly relevant to building an industry policy approach

36. Across all sectors (and regions), enablers such as skills, digital platforms, access to capital and research and development capabilities, connections with international organisations and markets, and a supportive business environment play a critical role in determining economic performance.
37. As a government, we have a number of related work areas focused on the key enablers that are highly relevant to building a new industry policy approach.
38. Our new approach to industry policy will therefore need to be aligned within other cross-cutting areas of work. This includes, for example, our climate change work programme, in particular, the Zero Carbon Bill. The Future of Work; Just Transitions; the 'Trade for All' agenda; Green Investment Fund; Tax Working Group; the Provincial Growth Fund; the introduction of the research and development tax credit; the new RS&I strategy; the Digital Economy work programme, the Innovative Partnerships programme, and reform of the Resource Management Act are also important components. And our National Science Challenges, the Provincial Growth Fund and the Green Investment Fund are relevant.
39. We must ensure these work programmes are mutually reinforcing as they are implemented across regions, sectors and communities.
40. A key policy intervention that this Government is in the process of implementing is the new R&D tax credit. By providing this incentive in the form of a tax credit, the Government will lower the cost to businesses of performing research and development. This will help businesses already performing R&D to do more, and for other firms who aren't currently doing R&D, to do so.

¹ New Zealand has a range of mature health technology companies (Fisher and Paykel Healthcare; Douglas Pharmaceuticals) and a growing cohort of start-up and smaller high growth potential firms (such as Pacific Edge; AroaBio; Kea Therapeutics and Aranz Medical).

41. The rationale for providing R&D tax credits to businesses is that there is under-investment by businesses in R&D because the investing firm does not capture all the benefits of the investment. The wider societal benefits of knowledge created through business R&D tends to be distributed widely rather than staying with the firm. While international evidence suggests that the returns on R&D expenditure by businesses are generally high, often 20-30 per cent, the evidence available for New Zealand suggests that the private returns for New Zealand firms may be considerably lower. Raising the returns for performing R&D through the R&D tax credit is likely to increase the amount and number of firms engaging in R&D.
42. I also fully expect this work to build on and leverage the work of the Innovative Partnerships programme in these sectors. The focus of the programme (which sits in the RSI portfolio) is on developing new areas of competitive advantage in transformative technology areas and emerging sectors. To do so, it uses a strategic sector-focused platform-play approach to work systematically across government and with domestic businesses and research institutions to set necessary pre-conditions for stimulating and scaling domestic R&D and innovation, and attracting globally leading firms and innovators to conduct R&D, innovate, invest, and build a sustained presence in New Zealand. In September, Cabinet agreed to scaling-up the programme. The programme builds capability within government to engage, and keep pace with new and transformative technologies and sectors and provides us with the opportunity to be entrepreneurial, catalysing a culture of agility, and mission-oriented innovation. This will complement and support the broader industry policy approach proposed in this paper.
43. The Government's planned Fair Pay Agreements system would also create a system for industry-wide (or occupation-wide) discussions. However, that system would have a different focus, specifically on employment relationships.
44. As noted above, I have a companion paper on productive investment *Deepening New Zealand's Early Stage Capital Markets* which details how we can further support sectors identified in this paper (such as agritech) through capital market development.
45. We have also agreed recently to prioritise a set of outcomes for government agencies to leverage procurement to drive greater collective impact, for example, increasing the skills within our construction sector and improving the emissions profile of the government's vehicle fleet. Procurement is also a key lever in supporting the growth of our digital technology sector.

Partnering with businesses and workers will be critical for success, and require sufficient resource

46. In developing this approach to industry policy, we will partner with key stakeholders to develop solutions to ensure that these sectors or industries maximise their contribution to New Zealand's economic development. These stakeholders will vary depending on each area; industry bodies and existing or new cluster organisations will be important (eg AgritechNZ; Marlborough Food and Beverage Cluster; Canterbury Tech). Other institutions or organisations will also be relevant.

47. This means developing a set of tools and methods to jointly assess the current state and challenges and opportunities for key sectors and segments within them, identifying objectives and options, assessing the options and identifying the priority initiatives and committing to take action.
48. This approach recognises that industry development is a collaborative effort, involving the public and private sectors, industry associations, unions and workers, universities and Crown Research Institutes, investors, service providers and local communities including iwi. All have a part to play in building the capabilities needed to sustain a productive, sustainable and inclusive society.
49. I expect MBIE will co-ordinate this work (working across government and with other stakeholders) with New Zealand Trade and Enterprise and Callaghan Innovation as important delivery agencies. The Government's advisory groups, such as the Business Advisory Council, the Small Business Council, Minister O'Connor's Primary Sector Council, Minister Jones's Forestry Ministerial Advisory Group and other groups as appropriate will be useful sources of intelligence and implementation advice.
50. Genuine partnering is resource intensive. As well as from our existing engagements with key sectors, we are learning from the approach undertaken by the newly established Just Transitions Unit in Taranaki, the work of the Provincial Development Unit in surge regions and the Innovative Partnerships programme in emerging sectors. This reinforces our desire for targeting effort but also to work with willing parties who align with the identified direction of travel.
51. We also need to acknowledge there are some parts of the economy where we need to collectively disrupt the status quo to achieve our broader policy objectives, whether for sustainable land use reasons or because of emerging technological developments. Our proposal for a Climate Change Bill will reinforce this need. Therefore our engagement with stakeholders in these areas (e.g. in parts of the manufacturing and primary sectors) will need to confront these issues head on and also have regard for the capability of these sectors and their workers to adjust to a changing operating environment.

Next steps

52. I will report back to this Committee by April 2019 on how the guiding principles identified in paragraph 26 above inform our approach to these seven sectors, and the core areas of focus within each of these broad sectors, working closely with the Research, Science and Innovation, Energy and Resources, Climate Change, Just Transitions, Regional Economic Development, Transport, Health and Primary Industries portfolios.
53. This will include existing work in many cases. A key aspect of our industry policy is to ensure that our existing work is well aligned and targeted to its objectives. Where additional initiatives are identified, these must complement and reinforce existing initiatives.

54. I note that other sector-based strategies are already in place or in development (eg we are currently consulting on the Aotearoa New Zealand Government Tourism Strategy, the International Education Strategy 2018-2030 was released in August this year, and the Minister for Arts, Culture and Heritage is supporting the development of an industry-led strategy for our screen sector, which has overlaps with the proposed focus on digital technologies above). These will continue.

Consultation

55. This paper has been prepared by the Ministry for Business, Innovation and Employment. The Ministry for Primary Industries, New Zealand Trade and Enterprise, the Ministry for the Environment, the Ministry of Education, Callaghan Innovation, the Ministry of Transport, the Energy Efficiency and Conservation Authority, the Ministry of Health and The Treasury have provided feedback. The Department of Prime Minister and Cabinet has been informed.
56. I expect that officials will engage with relevant groups such as the Business Advisory Council, the Future of Work Tripartite Forum, industry, science and academia, Iwi, local and central government agencies, investors, and unions as part of the report back.

Financial Implications

57. None, although various Budget bids from me and my Ministerial colleagues contribute to the sectors included in this proposal.

Legislative Implications

58. There are no legislative implications arising from this proposal at this point in time. However, in our engagements with particular sectors, there may be regulatory issues that are constraining the realisation of future opportunities. These will be progressed by the relevant Minister as appropriate.

Regulatory Impact Analysis

59. A Regulatory Impact Analysis is not required.

Human Rights

60. There are no human rights implications arising from this proposal.

Gender Implications

32. There are no gender implications arising from this proposal.

Disability Perspective

61. This paper is consistent with the Convention of the Rights of Persons with Disabilities, the New Zealand Disability Strategy and the Disability Action Plan 2014-2018.

Publicity

62. No specific publicity is proposed at this early stage.

Recommendations

The Minister for Economic Development recommends that the Committee:

1. **Note** that the Government has confirmed its Economic Strategy for New Zealand to build a more productive, sustainable and inclusive economy [CAB-18-MIN-0479]
2. **Note** that Cabinet invited the Ministers of Finance and Economic Development to identify areas of focus to improve New Zealand's productivity performance
3. **Note** that our economy enjoys many strengths and that we have a good platform for future growth but we do face domestic and international challenges
4. **Note** that many existing industry-focused interventions seek to support economic development but the cohesiveness of these is less clear, and there is limited confidence (among Ministers, officials and the private sector) that these initiatives are working consistently together and pushing in the same direction
5. **Note** that our new industry policy is shaped by a set of core principles, strategic priorities and selection criteria
6. **Agree** to the following guiding principles to inform our new approach to industry policy:
 - a. take a partnership-led approach developing solutions with stakeholders
 - b. build and use a strong evidence base to guide our focus and interventions including robust monitoring and evaluation
 - c. use specific sector strategies/roadmaps
 - d. leverage international connections
 - e. provide clear and consistent signals from government on a proposed course of action to realise economic and sustainable growth, (as well as improved wellbeing for New Zealanders)
7. **Agree** that the three strategic priorities of industry policy are:
 - a. move from volume to value
 - b. leveraging opportunities adjacent to existing key sectors
 - c. backing the industries of the future (emerging sectors)
8. **Agree** that the criteria for selecting our areas of focus are:
 - a. the sector is important for New Zealand's transition to a highly productive, low emissions future
 - b. there are opportunities to move from volume to value and/or diversify into adjacent sectors
 - c. New Zealand has some competitive advantage upon which to draw
 - d. we are already developing strategies
9. **Note** that across all sectors (and regions), enablers such as skills, digital platforms, access to capital, research and development capabilities, and international connections play a critical role in determining economic performance

10. **Note** that I have a companion paper on productive investment *Deepening New Zealand's Early Stage Capital Markets* on this agenda which outlines options on how we can further support the sectors identified in this paper through early stage capital market development
11. **Note** that I propose a focus on seven broad sectors:
 - a. Food and beverage
 - b. Manufacturing
 - c. Renewable Energy
 - d. Agritech
 - e. Digital technologies
 - f. Aerospace
 - g. Health technologies
12. **Note** that we will need to identify core areas of focus within these broad sectors to ensure our interventions realise each sectors potential
13. **Note** that there are significant cross-overs between the sectors identified above, and investment in analysis to understand value chains and the interplay between upstream and downstream industries will be critical
14. **Note** that the seven broad sectors align with the criteria described in recommendation 8, in that they are important to New Zealand's transition to a highly productive, low emissions future, provide opportunities to move from volume to value and/or diversify into adjacencies and/or New Zealand has a demonstrated competitive advantage
15. **Direct** the Minister for Economic Development to report back to this Committee by April 2019 on how the guiding principles identified in recommendation 6 above inform our approach to these seven sectors
16. **Note** that the report back will identify the core areas of focus within each of these broad sectors
17. **Note** that the Minister of Economic Development will work closely with the Ministers of Research, Science and Innovation, Energy and Resources, Climate Change, Just Transitions, Regional Economic Development, Transport, Health and Primary Industries to ensure alignment of this work across portfolios
18. **Note** that officials will engage with relevant groups such as the Business Advisory Council, the Future of Work Tripartite Forum, industry, science and academia, Iwi, local and central government agencies, investors, and unions as part of the report back

Authorised for lodgement

Hon David Parker

Minister for Economic Development

TAKING A MORE STRATEGIC APPROACH TO INDUSTRY POLICY

Selection criteria:

- The sector is important for New Zealand's transition to a low emissions economy (i.e. the sector has a low emissions future).
- There are opportunities to move from volume to value and/or to diversify
- New Zealand has some comparative advantage to draw on (we are not starting from nothing, and we can produce at a lower relative opportunity cost)



Government role	To drive for sustainable and productivity growth and prepare for technological disruption		To ensure a high level of co-ordination		To be nimble, connected and adaptive		
	Food and Beverage	Manufacturing	Renewable Energy	Agritech	Digital technologies	Aero Space	Health Technologies
Purpose of government's engagement	To transform food and beverage sectors towards higher value goods (more value from the same inputs)	To equip manufacturers with skills and technologies needed to remain internationally competitive	To support NZ's security of supply and to foster export-ready businesses and technologies and attract foreign investment in new energy technologies.	To create value for NZ from exporting technologies that will transform the global agriculture system	To increase exports of digitech products and services and develop digitech skills across the economy	Develop a space sector and autonomous air transport sector that has a meaningful impact on New Zealand's economy	To support NZers wellbeing and increase export of transformational technologies
Current State	External review of NZFIN Sustainable Food and Fibre Futures Fund Te Hono Innovative Partnerships implementing platform-plays to develop New Zealand's competitive advantage in Future Foods	Manufacturing Sector Report Industry 4.0 initiatives developed with Manufacturers' Network (Budget bid)	Transition from fossil fuels Emerging clean tech opportunities but no overarching strategy Innovative Partnerships developing platform-plays to develop New Zealand's competitive advantage in Sustainable Energy.	Opportunities but no co-ordinated delivery plan Draft Agritech strategy paper	Ministerial Advisory Group on Digital Economy and Digital Inclusion (DEDIMAG) Rescoping the Chief Technology Officer (CTO) function Digital Skills Forum AI Forum Small Business Council	NZ Space Agency developing a space strategy MOT developing a vision and strategy for the Unmanned aircraft sector. Innovative Partnerships implementing platform-plays to develop New Zealand's competitive advantage in space and unmanned aircraft sectors.	Medical Research Commercialisation Fund Health Research Strategy National Health Information Platform Health and disability system review Food Industry Taskforce
Next Steps	Co-ordination and consolidation? Lead Role Future Science – feeding into commercialisation Innovative Partnerships (future foods)	Rolling out Industry 4.0 initiatives Skills Shift Improving the linking of science with commercialisation	Innovative partnership on advanced energy technologies Hydrogen strategy Renewables target New Energy Development Centre (Taranaki)	Create the delivery plan including role of: <ul style="list-style-type: none"> • International Growth Fund • Incubators • Lincoln Hub 	Contribution of createch (AR/VR, Gaming R&D) Responding to AI Forum report Re-scoped CTO function Digital Skills Hui and measures to tackle digital skills shortages	Innovative Partnerships (New Space NZ and advanced aviation technologies)	Partnership with food and beverage industry to improve wellbeing Implement the health research strategy including through building DHB capacity and capability to support research and clinical trials
Roles	FINZ Callaghan Innovation MPI MBIE Primary Sector Council NZTE	MBIE Callaghan NZTE	MBIE NZTE EECA	Callaghan Innovation MBIE Lincoln TEC NZTE MPI	DIA MBIE (including Chorus) Callaghan Innovation NZTE	MBIE Callaghan NZTE Airways Transport CAA	MBIE MOH/DHBs
Enablers	R&D	Skills	Access to (venture) Capital	Provincial Growth Fund	Technology Platforms (including 5G)	Internationalisation activities including FTAs, NZTE, NZ Story	Innovative Partnerships Programme