From: s 9(2)(a)
To:
Cc:
Subject: Climate Commission"s impacts work - affiliation on Stats Data Lab project
Date: Tuesday, 4 February 2020 4:32:43 pm
Attachments: CCC_ClimateChangePolicy_Impacts_application-access-microdata-stats-data-lab-New-Project - 4 Feb 2020.docx
image001.png

Hi s 9(2)(a)

I'm getting in touch about the analysis on distributional impacts that the Commission has initiated.

As mentioned in some of our previous meetings, the Commission has commissioned Motu to build a whole-of-economy model to help inform our advice on emissions budgets and the emissions reduction plan. As part of this contract, s 9(2)(a) from Motu is building a distributional impacts microsimulation model that takes the information from that whole-of-economy model and disaggregates it to provide insights on the impacts of possible climate transitions on different sectors, regions and communities, demographic and socioeconomic groups.

As part of this distributional impacts work, we are looking to submit an application to Stats NZ for Data Lab access in the next few weeks. There are a series of datasets within the IDI (e.g., HES, MOE tertiary and training data) that we'd be looking to access as part of this work, but we're also hoping to access some of the tax data and tables derived from the tax data (e.g., the LBD, the linked employer-employee data with information about the employer) as these will provide more detail on the impacts on businesses and the workers they employ. In particular, this tax data will allow us to look at workers within businesses to give us a better sense of things like which employees are most likely to be released under certain scenarios, the labour and overall productivity of the business.

Having access to this tax data will significantly improve the analysis that the Commission is able to do on distributional impacts, and will be useful for the analysis that MfE and other agencies will need to carry out.

However, the tax databases are restricted for use to government researchers, and we have been informed by Stats NZ that, as a Crown Entity, the Commission is not classified as a government agency in this situation.

As a result, we need to identify a Ministry to effectively act as the sponsor for this work. Our understanding is that this would involve the Ministry signing a letter of engagement for the project, with one of the Ministry's staff members being listed on the application as an 'alternative contact' on the project. Under the agreement, Ministry staff members would be given microdata access or viewing access.

We're reaching out to you because MfE is our monitoring agency and is responsible for coordinating the response to the Commission's advice. Being affiliated with the project would allow the Commission and MfE to share information more closely over the course of this work, with the main outcome being to improve distributional impacts analysis in both the Commission's work and any work MfE may do in this area.

Would MfE be willing to be affiliated with this project?

We're also reaching out to MBIE to be affiliated given their role in the just transitions space, with the idea that the Commission, MfE and MBIE could all be involved in this project.

I've attached our application for your information. Please note that if MfE was willing to be involved, the letter of engagement would be separate from the ongoing work progressing a Memorandum of Understanding, albeit somewhat linked.

Happy to chat over the phone if it is easier.

Ngā mihi,
s 9(2)(a)

s 9(2)(a)

W climatecommission.govt.nz

Microdata access information sheet

Last updated 18 October 2019

Before submitting your application, we strongly recommend you discuss your proposed project with us first.

We will give you helpful advice and information specific to your proposed project, including:

- the feasibility of your research
- what data is most relevant to your proposal
- experts you could talk to
- likely concerns to address in your application.

To arrange a pre-application meeting, contact us by phone at **(04) 931 4253** or email access2microdata@stats.govt.nz

Factors to consider when preparing your application

Public interest value	Your proposed research must be of public interest.
Treaty responsiveness and human rights	You must analyse the data and share outputs in culturally appropriate ways. You must consider the potential impact of your research on the populations you are studying, particularly if your research involves Māori, Pasifika, or other underrepresented populations.
Confidentiality	All research outputs must protect the confidentiality of information supplied by respondents.
Ability of the research team	Researchers must have the quantitative research skills and experience needed to use microdata. If you want to use the IDI or LBD, we strongly recommend having intermediate SQL coding skills. Most researchers code in SAS or SQL, others use R or Stata.
Availability of alternatives to microdata	Applications are unlikely to be successful where there are good alternatives to using microdata.
Statistical purpose	You must be proposing to use the data for bona fide research or statistical purposes.
Suitable data is available	Suitable data must be available for your research. The data must be of sufficient quality for your analysis, and the counts of populations you are interested in must be high enough that there is no risk of identification of individual people or businesses.
Stats NZ can form an agreement	Researchers working within an organisation must be working with a reputable New Zealand-based organisation with whom Stats NZ can create and enforce an agreement for data access. Researchers undertaking research as a sole trader may still apply; in such cases the agreement is with the individual.
Public dissemination of results	The results of the research must be made publicly available.

All access to microdata must be consistent with the requirements of the Statistics Act 1975 (section 37).

Considerations that may affect access

You should check with us first if...
Your research is for commercial gain
The population you are interested in has low numbers
One or more of your researchers is based overseas
The lead researcher on your project is a student or junior staff member
You are a non-government researcher requesting access to business tax data

Access is unlikely to be approved if...
Your research is about named people or businesses
You do not have the support of the organisation you work within
Your research will not be released publicly
Researchers do not have the skills needed to use the Data Lab

Data Lab access

You can use the Data Lab in our Stats NZ offices:

- Auckland: 80 Greys Avenue, Auckland CBD
- Wellington: 8 Gilmer Terrace, Wellington
- Christchurch: BNZ Centre, Level 1, 120 Hereford Street, Christchurch

These locations are available Monday–Friday from 8:30am–5pm.

To book places, or to enquire about availability of space, contact the Microdata Access team at access2microdata@stats.govt.nz or Stats NZ Reception (04) 931 4600.

If you have a project that has been active for more than six months, you can apply to set up a remote Data Lab in your own workplace. Your location and project must meet security conditions. **Please contact us before applying** at (04) 931 4253 or email us at access2microdata@stats.govt.nz.

Privacy

We collect personal information from you, including information about your name, phone number or email, wi-fi activity, and session activity. This information will be used to manage microdata access, account billing, and for auditing purposes.

You have the right to ask for a copy of any personal information we hold about you, and to ask for it to be corrected if you think it is wrong. If you'd like to ask for a copy of your information, or to have it corrected, please contact us at (04) 931 4253 or email us at access2microdata@stats.govt.nz.

Software requirements

Researchers using the Data Lab need quantitative research skills and the ability to query large datasets based on their parameters of interest. If you intend to use the Integrated Data Infrastructure (IDI) or Longitudinal Business Database (LBD), we strongly recommend having intermediate SQL coding skills. Most researchers code in SAS or SQL, while others prefer coding in R or Stata. User support is not provided for statistical software packages. See Resources for IDI and LBD users for basic coding resources.

Stats NZ may be able to host **additional software at an additional cost**. Please discuss this with us.

Stats NZ provides access to the following software for use in the Data Lab:

✓	Microsoft Office suite
✓	Microsoft SQL Server Management Studio
✓	Stata
✓	RStudio
✓	Git
✓	GitLab (licence fee applies)
✓	SAS

Publishing your research

We encourage you to talk to us before you publish your research. We would like to work with you to see how we can help promote your research, e.g. a joint media release, or the opportunity for you to present your work at one of our user forums.

Once your research has been published, please let us know, and send us a link if possible. This includes anything you've produced – journal articles, reports, presentations, websites, etc. Please send links to access2microdata@stats.govt.nz.

We publish links to all research using Stats NZ microdata in our research database, Research using Stats NZ microdata.

Microdata access checklist

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Before you apply	
	Pre-application meeting
	Make sure your project fits the criteria in the Microdata Access Information Sheet (attached)
	Give some thought to how your application will address the factors to consider listed in the Microdata Access Information Sheet (attached)
	Read the Microdata Access Guide [link]

Your application should include...	
	The completed application form
	Current CVs for all new researchers (including those who require Data Lab **viewing access**)
	Names and contact details of **two referees** for each new researcher (referees cannot be researchers on the project)
	If you are applying to access Ministry of Health data in the IDI: either your approved HDEC application, or a letter of confirmation from HDEC that your project is out of scope for review
	Any other information you would like to include as context to your application (e.g. university ethics approval, evidence of consultation with iwi)

Email your completed application form in Microsoft Word format, and any additional documents, to access2microdata@stats.govt.nz.

Application to access microdata in the Stats NZ Data Lab

Last updated 18 October 2019

Fill in this form if you want to apply for a new microdata project

- The application process runs on a six-week cycle. Applications received before the deadline for a cycle will be processed in that batch; applications received after the deadline will go into the following batch.
- Final approval rests with the Government Statistician or delegated authorised person. Once approved, we will work with you to arrange a contract and prepare for your arrival in the Data Lab.
- See Apply to use microdata for research for application-cycle dates, deadlines and more details about the application process.

Email your completed application form in Microsoft Word format to access2microdata@stats.govt.nz.
Remember to attach current CVs and ethics approval (where applicable).

Project title Enter the name of your proposed microdata project.
The Distributional Impacts of Climate Change and Climate Policy

Part 1: About you

1.1 Main contact

Provide details of the main contact for your project.

Note: We'll publish your contact email on our website for the general public to read (see Research using Stats NZ microdata).

Name	Organisation and position (eg Stats NZ, Senior researcher)	Phone	Email
s 9(2)(a)	Motu, Fellow	s 9(2)(a)	s 9(2)(a) @motu.org.nz

1.2 Alternative contact

In case we can't contact the lead researcher while we assess this application, provide details of an alternative contact person.

Name	Organisation and position (eg Stats NZ, Senior researcher)	Phone	Email

1.3 Researcher(s) requiring Data Lab login

Provide details of all researchers who will work on your project in the Data Lab. Subject to checks, we will give them access to microdata via a unique login account, and confidentiality training if this is their first project. If your main or alternative contact require Data Lab login, please also list them here.

Note: We will ask all researchers to sign a Declaration of Secrecy, Researcher Undertaking, and the IR 820 certificate of secrecy before accessing any microdata, as required by the Statistics Act 1975.

Name	Organisation and position (eg Stats NZ, Senior researcher)	Phone	Email	Reason for access (eg lead researcher)
s 9(2)(a)	Climate Change Commission, Principal Analyst	s 9(2)(a)	s 9(2)(a)	Researcher
s 9(2)(a)	Motu, Fellow			Lead researcher
s 9(2)(a)	Motu, Research Assistant			Research assistant
s 9(2)(a)	Motu, Research Assistant			Research assistant

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1.4 Researcher(s) requiring Data Lab viewing access

Provide details of researchers who will need to access the secure Data Lab but will not be working directly with the microdata. We will **not** give these researchers access via a unique login account, but they will be required to undergo confidentiality training. If your main or alternative contact require Data Lab viewing access, please also list them here.

Note:

- While access to the Data Lab is restricted, we recognise that data experts may require access to view the data in the Data Lab in order to advise on the project. Please include an explanation of why the listed researchers require access to view unconfidentialised data in the Data Lab.
- We will ask all researchers to sign a Declaration of Secrecy, Researcher Undertaking, and the IR 820 certificate of secrecy before viewing any microdata, as required by the Statistics Act 1975.

Name	Organisation and position (eg Stats NZ, Senior researcher)	Phone	Email	Reason for access (eg expert advisor on tax data)
s 9(2)(a)	Climate Change Commission, Principal Analyst	s 9(2)(a)		Expert advisor on economics
	Climate Change Commission, Principal Analyst			Expert advisor on requirements of analysis for the Commission's functions under the Climate Change Response Act
	Climate Change Commission, Senior Analyst			Expert advisor on modelling and analysis

1.5 Curriculum vitae(s)

Attach a **current CV** for researchers who will be using the Data Lab **for the first time, including researchers requiring Data Lab viewing access.** The CV should include:

- an up-to-date employment history
- examples of peer-reviewed research publications (if any)
- certified academic record from the issuing institution (for academic researchers)
- details of two referees we can contact (referees cannot be researchers on the project).

Have you attached CVs for **all** first-time Data Lab researchers? Leave blank if not applicable.	YES / NO	YES

1.6 Background check

Have any of the researchers named in this application been the subject of a disciplinary process or research ethics complaint? Is there any other reason why their character may be called into question regarding access to microdata?

YES / NO	NO	If **YES**, provide details	

1.7 Researchers requiring access to GitLab The GitLab Extension will be available to users upon request. The licence fee is approximately $80 per user/per year.
Please list the names of each researcher who will require GitLab.

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Part 2: About your organisation

2.1 Organisation(s)

Provide details of the organisation requesting access to microdata. If this is a joint project, list the other organisations.

Name	Address
Climate Change Commission	Level 21, Aon Centre, 1 Willis Street, Wellington

2.2 Does your organisation(s) support this research proposal?

YES / NO	YES	If **NO**, provide details	

2.3 Does your organisation(s) have a history of carrying out research of a high standard?

For example, peer-reviewed published papers, working papers informing government policy, or presentations to international conferences.

YES / NO	NO	If **NO**, provide details	The Climate Change Commission is a new organisation. It was set up by the Government as an Independent Crown Entity in December 2019. However, the Interim Climate Change Committee is the precursor to the Commission and produced two high standard reports informing Government policy entitled *Action on agricultural emissions* and *Accelerated electrification*. Furthermore, the researchers involved in this work have a history of carrying out research to a high standard.

2.4 Authorised signee

Provide details about the person authorised to sign a contract with Stats NZ for microdata access if this application is successful.

Name	Jo Hendy	Position	Chief Executive	Organisation	Climate Change Commission

2.5 Invoicing

Provide details of the person to whom we should send invoices.

Note:

- The Data Lab operates on a **cost-recovery basis**. See Apply to use microdata for research for a list of costs.
- Unsuccessful applications will not incur any charge.

Name	Address	Phone	Email
s 9(2)(a)	Level 21, Aon Centre, 1 Willis Street, Wellington	s 9(2)(a)	s 9(2)(a)

Part 3: Your location

3.1 Research location(s)

Indicate (with an 'x') the location(s) where you plan to carry out your research.

Note: The Data Lab service is available at Stats NZ offices around New Zealand and at a number of secure research facilities. See the Microdata Access Information Sheet (attached) for more information about locations and opening hours.

	Stats NZ Auckland Auckland: 80 Greys Avenue, Auckland CBD	
X	**Stats NZ Wellington** HP House, 8 Gilmer Terrace	
	Stats NZ Christchurch BNZ Centre, Level 1, 120 Hereford Street	
X	**Existing secure research facility (remote lab)**	
	Address of facility	Motu Economic and Public Policy Research, 93 and 97 Cuba Street, Wellington

Part 4: Pre-application discussion

4.1 Have you had a pre-application meeting with Stats NZ?

YES / NO	YES	If **YES**, provide details (eg when, with whom)	
Have you had any other discussions with Stats NZ staff about this project?			
YES / NO	NO	If **YES**, provide details (eg when, with whom)	
Have you been referred by someone outside Stats NZ?			
YES / NO	NO	If **YES**, provide details (eg when, with whom)	

Let us know at access2microdata@stats.govt.nz if you would like us to connect you with other researchers with similar interests. (Note: this will not slow down your application).

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Part 5: About your project

We encourage you to give us as much detail as you can about your project to help us understand your application. Please write in **plain English** and **limit technical jargon** where possible.

5.1 Project title

Enter the name of your proposed microdata project.

The Distributional Impacts of Climate Change and Climate Policy

5.2 Project summary

Using plain English, write a **short paragraph** summarising your proposed project. We'll publish this summary on our website for the general public to read (see Research using Stats NZ microdata). Include:

- research question(s) to be investigated
- anticipated outcomes.

The project will examine the potential distributional impacts from climate change and climate policies for different population groups. Using predicted impacts for different sectors and regions from various models (e.g., economy-wide models, sectoral models), this project will delve into the characteristics of those subgroups most likely to be affected. The project will use data about people, households, businesses, and workers to develop outcome measures (e.g., employment, wages, s 9(2)(b)(ii) to examine the extent to which different groups are likely to be affected.

5.3 Project objectives

Elaborate on your project summary below, including more detail about:

- your research objectives
- research question(s) to be investigated
- anticipated outcomes
- how the research will contribute to the public good or the development of policy.

This research project will be used to provide insights on key questions such as the following:

- What climate policies are technically and economically feasible when factoring in the interactions between sectors and economy-wide constraints?
- What are the economic consequences of different levels of emissions reductions (including no reduction), different types of policy interventions, and different scenarios of technological and economic change?
- What distributional impacts could climate changes, emissions budgets, or climate policies have on different sectors, regions, generations and socio-economic groups?
- What impact will domestic policies have on New Zealand's international trade and competitiveness?

The independent Climate Change Commission was established in late 2019 under the Climate Change Response Act, which allocated the following functions to the Commission:

- Providing advice on 5-yearly emissions budgets
- Providing advice on policies in the emissions reduction plan
- Review the 2050 target and recommend changes to the target, if necessary
- Monitor and report on progress to meeting emissions budgets and the 2050 target
- Prepare national climate change risk assessments
- Prepare reports on the implementation of the national adaptation plan

This project will be used to inform the Commission about the impacts and implications of different policies used to transition New Zealand to a low emissions economy in order to better inform the Commission as they carry out their functions. The results from this project will factor into the Commission's analysis and advice on emissions budgets. Hence, this research will contribute both to the public good and also to the development of policy.

The anticipated outcomes of this research will be limited primarily to summary statistics and regression output for measures related to workers, businesses, and households (e.g., employment, wages, s 9(2)(b)(ii)), generally in the form of tables but possibly in the form of graphs or other figures. All output will be aggregated to meet confidentiality protection standards and requirements.

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5.4 Research methodology

To help us evaluate the feasibility of your proposed project, describe your research methodology and research design, and explain the significance of both to the questions you want to research. Elaborate on:

- the approximate size of your population of interest
- any variables of interest.

The project will examine the potential distributional impacts from climate change and climate policies for different population groups across several dimensions (and combinations of dimensions), including sectoral, geospatial, demographic, and socio-economic categories. Using the results from various models predicting impacts for different sectors and regions (e.g., economy-wide models, sectoral models, land-use models), this project will delve into the characteristics of those most likely to be affected by these changes or policies. Hence, the base populations of interest for this project include all households, businesses, and workers in New Zealand. These are all fairly large populations. According to the New Zealand Business Demography Statistics at February 2019[1], there were 546,735 economically significant enterprises that produce goods and services with 582,483 business locations employing 2,285,000 workers. At the end of 2018, there were approximately 1,758,900 households in New Zealand.[2] While we will be looking at various characteristics of these populations (which implies sub-groups), these groupings are expected to be fairly broad. In addition, this research will use multiple years of data which should increase the number of unique households, businesses, or workers included in the analysis.

s 9(2)(b)(ii)

[redacted]

s 9(2)(b)(ii)

[redacted]

Specifically, this project will evaluate the potential impacts of climate change and climate policies on aspects of these various sub-populations using data from the Integrated Data Infrastructure (IDI) and Longitudinal Business Database (LBD). The key data sets in the analysis include the following:

- LBD
  - Employer Monthly Schedule
  - Fabling & Maré labour tables
  - Fabling & Maré productivity tables

[1] These statistics include economically significant enterprises that produce goods and services and were downloaded from the Statistics NZ website: https://www.stats.govt.nz/information-releases/new-zealand-business-demography-statistics-at-february-2019. We plan to include all businesses

[2] This statistic is from the December 2018 quarter dwelling and household estimates: https://www.stats.govt.nz/information-releases/dwelling-and-household-estimates-december-2018-quarter.

- IDI
  - Core data
  - Geographic data (GEOGRAPHIC)
  - Education and Training Data (MOE)
  - Household Labour Force Survey (HLFS)
  - Household Economic Survey (HES)
  - Tax data and tax derived tables (IR)
  - Census

While we will examine relationships at the micro level, outcome measures will be aggregated sufficiently to meet confidentiality protection standards and requirements. Outputs will primarily be limited to summary statistics and regression output for measures related to workers, businesses, and households (e.g., employment, wages, s 9(2)(b)(ii) generally in the form of tables but possibly in the form of graphs or other figures.

5.5 Treaty responsiveness and human rights

We strongly encourage you to begin consulting with your population(s) of interest before you begin the application process.

You must consider the potential impact of your research on the specific population(s) you are studying, and the potential value of your research to them. In addition, your research should be supported by the specific population(s) you are studying, and if possible, should have involvement or advice from researchers or other experts representing these population(s).

If your project includes a focus on, or could end up focused on, specific communities (e.g. new migrants, the elderly, disabled people), ensure you complete this section using the outlines provided. For example, if your project includes a focus on Māori, you will consider the potential cultural impact of your research outcomes on whānau, hapū, iwi and Māori groups, and seek appropriate advice and guidance from Māori cultural advisors.

You should elaborate on:

- any experience your research team has in working with or researching these groups
- whether these groups support your research
- the consultation you have already undertaken with these groups on the design and methodology of your research
- how you will continue to consult with these groups over the course of your project
- the potential value of your research to these groups
- any potential risks to these groups, and how these risks will be managed/mitigated.

The project will examine the distributional impacts of climate change and climate policies on various subgroups of the population (i.e., those businesses, workers, and households most likely to be impacted by future changes) in order to prepare for and ease into necessary transitions as the economy inevitably evolves due to these pressures. s 9(2)(b)(ii)

s 9(2)(b)(ii)

Hence, we expect this research to be extremely valuable to these populations, and in particular to those that are most at risk from these changes.

Some analyses will be conducted using ethnicity to characterise workers or households that are likely to be impacted by a policy or change. For example, ethnicity would be used to describe those workers in sectors most likely to be impacted, either negatively or positively, by a climate policy to see if the policy is expected to create disparate outcomes across ethnic groups. Similarly, if the research indicates that some changes are more likely to negatively impact certain ethnic groups more than others, policy makers would be better able to target policies to help these specific groups.

While the research is expected to be beneficial to these groups, potential risks will be managed or mitigated by engaging with stakeholders to discuss the research.

The Commission recognises the special nature of the partnership between the Crown and iwi/Māori and its responsibility to give effect to the principals of Te Tiriti o Waitangi. We have experienced personnel in our research team who will guide our approach to working with iwi/hapū/whānau Māori and our Māori engagement strategy. We are also working collaboratively with other research teams and Māori representatives in the relevant sectors (including in our Technical Reference Groups), and are in the process of developing a Māori Engagement Strategy and Māori Capability Development Strategy which will specify our consultation approach and identify benefits to the research group, and potential risks/mitigation.

The Commission is also required to proactively engage with relevant stakeholders and to publicly consult prior to finalising its advice. As part of this requirement, the Commission has already set up Sectoral Technical Reference Groups as well as a Quantitative Modelling Group that have and will continue to provide feedback about the research via periodic meetings. These groups bring sector-specific knowledge and research expertise to the table and will provide valuable feedback about the findings of this research. The technical reference groups include technical experts from a range of diverse backgrounds, including representatives of iwi and Māori.

5.6 Anticipated outputs

Describe the anticipated outputs of your proposed project. Include all intermediate and final results; for example, aggregated tables, index, or new methodology. Elaborate on:

- the granularity of your results
- how you considered output rules and confidentiality in your outputs.

Note: We have limitations on outputs with small underlying counts. See Microdata output guide for the methods and rules for confidentialising output produced from Stats NZ's microdata.

While we will examine relationships at the micro level, outcome measures will be aggregated sufficiently to meet confidentiality protection standards and requirements. Outputs will primarily be limited to summary statistics and regression output for measures related to workers, businesses, and households (e.g., employment, wages, s 9(2)(b)(ii) , generally in the form of tables but possibly in the form of graphs or other figures. The granularity of the results will be determined by the feasibility of producing confidentialised output, but it is expected that there will be no problems releasing the outputs needed for the project.

5.7 Alternatives to microdata

Outline any alternatives to using the microdata you identified and explain why they are not appropriate for the proposed project.

Public-use data files, especially for businesses, do not provide the degree of dimensionality required for this project nor do they allow for the examination of heterogeneity within these populations. An earlier project commissioned by the Interim Climate Change Commission used publicly available data to examine the potential impact of land-use change on employment across different sectors and regions, and the analysis was limited by the lack of detailed sectoral level information as well as by detailed information about the composition of the workforce in these sectors. For example, publicly available LEED data has fairly detailed industry breakdowns for employment but lacks detail on other aspects such as geography or worker age.

5.8 Dissemination methods

Describe how the results of your research will be disseminated. Elaborate on:

- the format(s) your results will be published in; for example, published report, in-house report, seminars, paper for journal, or conferences
- how the results of your research will be made available to the public.

Note: We expect researchers to document and share their code on the Wiki in the Data Lab, and on MeetaData once the code has cleared final checks. We also expect researchers to send us links to their research findings so that they can be shared on Research using Stats NZ microdata.

The dissemination of research findings will include both in-house and published reports, as well as other standard dissemination mechanisms such as academic presentations at conferences and seminars, working papers, and potentially journal publications. For the work done by Motu, we plan to present the research at a Motu Public Policy seminar in Wellington and also to publish the research report as a Motu working paper. Researchers on the project will also send Statistics NZ links to our research findings, so the results of this work can be shared.

We are also happy to document and share code that will be useful to other researchers. The Commission is dedicated to being open and transparent and is requiring code from the project to be open source to the extent possible.

5.9 Timeframe

Indicate when you need access to the Data Lab.

Preferred start date for access to the Data Lab	Mid-March 2020
Estimated end date for access to the Data Lab	Mid-March 2022
Outline any dependencies or important dates that affect your application	Initial results will be needed by October 2020, with additional results being needed by February 2021.

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Part 6: Data requirements

Note: We remove or encrypt all personal identifiers in the datasets. Access to microdata is governed by the Statistics Act 1975, which means Stats NZ is legally required to protect confidential personal and business information.

6.1 Data

Through the Data Lab, researchers can access the IDI, LBD, and other Stats NZ surveys. See Microdata available in the Data Lab to find out what data can be accessed through the Data Lab.

List the data you need access to in order to answer your research question(s). To help us understand your request, explain why you need each dataset. We will need a reason for each dataset requested and it must be clear how each dataset relates to your research. For example:

- Do you need it to answer a certain question?
- Do you need it to control for a variable?

Dataset name Contains the tables/variables you are interested in using. (eg B4 School Checks)	**IDI application code** If applying to use the IDI, quote the application code from Data in the IDI. (eg MOH_B4SC)	**Reason for access** Explain why the dataset is required.
Industry training education data	MOE	s 9(2)(b)(ii)
Primary and secondary schools data	MOE	
Targeted training data	MOE	
Tertiary education data	MOE	
Address notification	GEOGRAPHIC	This dataset will provide information about where households' and workers' residences are located. This will primarily be used to supplement information about where workers live relative to where they work. This will allow for the examination of where new jobs are expected to be located relative to where workers best suited for those jobs are likely to reside. Similarly, this information would allow for the examination of where workers in sectors expected to contract reside. Moreover, this will be used to supplement the LEED matching of workers to geographic locations for enterprises with more than one location.

Address notification – full	GEOGRAPHIC	This dataset will provide information about where households' and workers' residences are located. This will primarily be used to supplement information about where workers live relative to where they work. This will allow for the examination of where new jobs are expected to be located relative to where workers best suited for those jobs are likely to reside. Similarly, this information would allow for the examination of where workers in sectors expected to contract reside. Moreover, this will be used to supplement the LEED matching of workers to geographic locations for enterprises with more than one location.
Person overseas spell	GEOGRAPHIC	This dataset will provide information about immigration and emigration, especially for workers. This will be used to examine gaps in employment of workers in order to better understand if workers have left employment and have stayed in the country or if they have gone overseas. This will be important for better understanding the potential pool of workers available for work.
Longitudinal Business Database	LBD	This dataset will be one of the key data sets used in this project to provide information about the characteristics and outcomes of businesses and workers. The key outcomes will include employment, wages, revenues, business entry, and business exit. The key characteristics for businesses will include industry, size (by FTE and number or workers), location, s 9(2)(b)(ii) The key characteristics for workers will include age, FTE, number of jobs, s 9(2)(b)(ii) Most of this information will be obtained from the Employer Monthly Schedule and the derived labour and productivity tables from Fabling & Maré. The data from these tables will be supplemented by other tables in the LBD as described by Fabling's 2016 paper, "A Rough Guide to the Longitudinal Business Database (2nd Edition)"[4]. These outcomes and characteristics will be used to examine the potential impacts of proposed policies and changes on businesses and workers (including working proprietors) as well as to describe those most likely to be impacted. For example, this dataset will be used to describe the characteristics of businesses and workers most likely to be negatively impacted by a proposed policy. s 9(2)(b)(ii)

[3] s 9(2)(b)(ii) the paper by Fabling and & Maré: http://motu-www.motu.org.nz/wpapers/15_17.pdf.
[4] See http://motu-www.motu.org.nz/wpapers/19_03.pdf.

Household Economic Survey (HES)	HES	s 9(2)(b)(ii)
Household Labour Force Survey (HLFS)	HLFS	
Tax data (for government researchers)	IR	This dataset will be used to supplement the data in the LBD and to provide additional information about businesses, business owners, and workers. The outcomes and characteristics derived from this data set will be used to examine the potential impacts of proposed policies and changes on businesses and workers (including working proprietors) as well as to describe those most likely to be impacted.
Tax derived tables	IR	This dataset will be used to supplement the data in the LBD and to provide additional information about businesses, business owners, and workers. The outcomes and characteristics derived from this data set will be used to examine the potential impacts of proposed policies and changes on businesses and workers (including working proprietors) as well as to describe those most likely to be impacted.
International travel and migration data	CUS	This dataset will provide information about immigration and emigration, especially for workers. s 9(2)(b)(ii)

Census	Census	This dataset will provide basic information about the vast majority of the population (e.g., highest education level, occupation). This will be used in combination with the other data sets to characterise the population of workers s 9(2)(b)(ii) most likely to be impacted. While these data are collected less frequently than other data, the benefit is its broad coverage. This will also allow us to benchmark some of our results from using the other data sets.

If you are a researcher interested in linking data to the IDI or LBD, there is a separate application form to fill in. For more information, see How to add a dataset to the IDI or LBD.

6.2 Ethics approval

If you are requesting access to any Ministry of Health data in the IDI, you will need to check if ethics review is required from the Health and Disability Ethics Committee (HDEC). You must supply us with documentation as follows:

- If HDEC ethics review **is required**, you will need to send us the findings of an HDEC ethics review.
- If HDEC ethics review **is not required**, you will need to send us a letter of confirmation that your project is out of scope for review from HDEC.

For instructions on how to apply for a review or request a letter of confirmation, go to the HDEC website. For more information, see the HDEC website or contact us.

Have you attached either a copy of HDEC's findings, or the letter of confirmation your project is out of scope? Leave blank if not applicable.

YES / NO	Not applicable	if **NO**, provide details	

Email your completed application form in Microsoft Word format, and any additional documents, to access2microdata@stats.govt.nz.

From: s 9(2)(a)
To:
Subject: FW: Climate Commission"s impacts work - affiliation on Stats Data Lab project
Date: Monday, 17 February 2020 10:32:16 am
Attachments: image001.png

Ngā mihi,
s 9(2)(a)

s 9(2)(a)

W climatecommission.govt.nz

From: s 9(2)(a) @mfe.govt.nz>
Sent: Monday, 17 February 2020 9:56 am
To: s 9(2)(a) @climatecommission.govt.nz>
Cc: s 9(2)(a) @mfe.govt.nz>; s 9(2)(a) @mfe.govt.nz>
Subject: RE: Climate Commission's impacts work - affiliation on Stats Data Lab project

Hi s 9(2)(a)

Just letting you know that I will be the contact for this from the MFE end, I am only into my second week at MFE but have plenty of experience with the IDI.

With this said it would be good to get together to have a change about your thinking in terms of MFE involvement. I would be happy to come over to you.

Kind regards,

s 9(2)(a)
Ministry for the Environment – Manatū Mō Te Taiao
s 9(2)(a) @mfe.govt.nz | Website: www.mfe.govt.nz

From: s 9(2)(a) @mfe.govt.nz>
Sent: Friday, 14 February 2020 4:28 pm
To: s 9(2)(a) @mfe.govt.nz>
Subject: FW: Climate Commission's impacts work - affiliation on Stats Data Lab project

Hi s 9(2)(a)

Here's the CCC's application. I was thinking that the table of factors to consider at the front in the supporting information provided by Stats provides a good structure of things to include in

the letter, but you'll have a better understanding than I will of what it will need to say.

Cheers

s 9(2)(a)

From: s 9(2)(a) @climatecommission.govt.nz>
Sent: Tuesday, 4 February 2020 4:33 PM
To: s 9(2)(a) @mfe.govt.nz>; s 9(2)(a) s 9(2)(a) @mfe.govt.nz>
Cc: s 9(2)(a) @climatecommission.govt.nz>; s 9(2)(a) s 9(2)(a) @climatecommission.govt.nz>; s 9(2)(a) s 9(2)(a) @climatecommission.govt.nz>; s 9(2)(a) s 9(2)(a) @climatecommission.govt.nz>
Subject: Climate Commission's impacts work - affiliation on Stats Data Lab project

MFE CYBER SECURITY WARNING
This email originated from outside our organisation. Please take extra care when clicking on any links or opening any attachments.

Hi s 9(2)(a)

I'm getting in touch about the analysis on distributional impacts that the Commission has initiated.

As mentioned in some of our previous meetings, the Commission has commissioned Motu to build a whole-of-economy model to help inform our advice on emissions budgets and the emissions reduction plan. As part of this contract, s 9(2)(a) from Motu is building a distributional impacts microsimulation model that takes the information from that whole-of-economy model and disaggregates it to provide insights on the impacts of possible climate transitions on different sectors, regions and communities, demographic and socioeconomic groups.

As part of this distributional impacts work, we are looking to submit an application to Stats NZ for Data Lab access in the next few weeks. There are a series of datasets within the IDI (e.g., HES, MOE tertiary and training data) that we'd be looking to access as part of this work, but we're also hoping to access some of the tax data and tables derived from the tax data (e.g., the LBD, the linked employer-employee data with information about the employer) as these will provide more detail on the impacts on businesses and the workers they employ. In particular, this tax data will allow us to look at workers within businesses to give us a better sense of things like which employees are most likely to be released under certain scenarios, the labour and overall productivity of the business.

Having access to this tax data will significantly improve the analysis that the Commission is able to do on distributional impacts, and will be useful for the analysis that MfE and other agencies will need to carry out.

However, the tax databases are restricted for use to government researchers, and we have been informed by Stats NZ that, as a Crown Entity, the Commission is not classified as a government agency in this situation.

As a result, we need to identify a Ministry to effectively act as the sponsor for this work. Our understanding is that this would involve the Ministry signing a letter of engagement for the project, with one of the Ministry's staff members being listed on the application as an 'alternative contact' on the project. Under the agreement, Ministry staff members would be given microdata access or viewing access.

We're reaching out to you because MfE is our monitoring agency and is responsible for coordinating the response to the Commission's advice. Being affiliated with the project would allow the Commission and MfE to share information more closely over the course of this work, with the main outcome being to improve distributional impacts analysis in both the Commission's work and any work MfE may do in this area.

Would MfE be willing to be affiliated with this project?

We're also reaching out to MBIE to be affiliated given their role in the just transitions space, with the idea that the Commission, MfE and MBIE could all be involved in this project.

I've attached our application for your information. Please note that if MfE was willing to be involved, the letter of engagement would be separate from the ongoing work progressing a Memorandum of Understanding, albeit somewhat linked.

Happy to chat over the phone if it is easier.

Ngā mihi,

s 9(2)(a)

s 9(2)(a)

W climatecommission.govt.nz

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Attachment mentioned in the email of 14 Feb 2020 at 4.28pm not released as same as document *63a* above.