Data sources

Data was sourced from two areas: Regional Councils, and Alex Harris OIA requests of some Regional Councils listed on

https://fyi.org.nz/user/alex_harris?utf8=%E2%9C%93&user_query=combustion&request_latest_stat us=&commit=Search+contributions+by+this+person

Regional Council published data was usually a dataset for <u>all</u> current Consents, and sometimes for the current Discharge To Air or Discharge Consents as well.

Data Standard

Name	Description	Details	Comments
CouncilName	Name of the Council that issued the Consent	Text250	
SourceDate	Date that the data was sourced from the Council	Date	
ConsentID	Unique ID for the Consent	Text250	
Туре	Discharge etc.	Text250	
SubType	To Air etc.	Text250	
Status	Current etc. where available	Text250	
Description	Description of the consent activity Generally this includes the fuel type and emission process	Text250	
HolderName	Name of the Consent holder	Text250	
HolderAddress	Address of the Consent holder	Text250	Not common
LINZOwner	Title Owner at the Consent point from the LINZ Owners database	Text250	Where applicable. Only used the first instance.
AddressLocation	Address or location of the Consent	Text250	
LINZAddress	Address of the Consent point from the LINZ Address database	Text250	Where applicable. Only used the first instance.
StartDate	Consent start date	Date	
ExpiryDate	Consent expiry date	Date	

IndustryPurpose	The industry purpose that the Consent is being used for	Text250	
Coal	Fuel used	Text250	
Oil	Fuel used	Text250	
Diesel	Fuel used	Text250	
Gas	Fuel used	Text250	
Wood	Fuel used	Text250	
Other	Fuel used	Text250	
Unknown	No fuel type stated	Text250	NA if not thought to emit any combustion products Unknown if the industry is likely to have combustion emissions Emission type if the fuel is not specified
Power	kW or MW	Text250	kW or MW or KVA
MaxFuelRate	I/h, kg/h etc.	Text250	Some data has no units
EASTING	NZTM projection easting	Real	Sometimes missing. Can be extracted from the GIS data
NORTHING	NZTM projection northing	Real	Sometimes missing. Can be extracted from the GIS data
URL	URL of any Consent webpage	Text250	Not common but included as Canterbury, Hawkes Bay and Otago have published these.
Comments	Processing comments	Text250	Only where the Council source data was supplemented

Note:

To clarify the coal/oil/gas/wood columns:

- The URL has not been checked, where there is likely to be more detail that might change the entry from Unknown in the Unknown column to say Boiler in the Coal column.
- If it is indicated that there is a coal boiler then Boiler is the entry under Coal or Boiler X 2 if there are 2 boilers.
- If it is indicated that coal is burnt in a boiler secondary to say wood, then Boiler is the entry under both Coal and Wood.

Regional Processing notes

General

The LINZ address is given as it shows more specific details than some addresses given by Council, but as it links to the first of any multiple addresses for a title it may be incorrect but nearby.

The LINZ Owners are given as they indicate the owner of the property that the Consent was issued for. It will be different to the consent holdername if leased, or if an agent applied for the consent.

It is presumed that any asphalt/tar plants use <u>oil</u> burners to heat the mix with. Some specified that they are using diesel.

Peat processing is considered to have combustion drying facilities.

Car paint sprayers are labelled as NA in the Unknown column, but some appear to have some form of baking/drying chamber that may involve combustion.

Any domestic burner consents were noted as NA in the Unknown column.

Larger sewage treatment plants are considered likely to have some form of sludge drying combustion so are labelled as Unknown in the Unknown column.

Canterbury

Used Discharge To Air Consents

Only DTA consents for Large Scale Burners and Timber Drying were selected. Timber Drying was found to have some boilers present and the details were loaded manually from the URL links. Small Scale Burners were excluded as they were considered to be domestic fires.

Some duplicate rows for each Consent ID are present, probably to allow for multiple MaxFuelRates at a site for the one Consent.

All rows where no Fuel Type was recorded, the fuel types were extracted from the URL links.

Comparison with Alex Harris Results showed that only one Consent was common to both – Synlait. This indicates that many combustion consents were not provided to Alex Harris, and that the selection of consents types used here missed some listed in the Alex Harris data – this warrants further investigation.

Taranaki

Used Current Consents

Some fuel sources are given as Petroleum flaring and some as Hydrocarbon flaring according to the wording in the Description, but they are probably both the same thing.

Gisborne

Only data from Alex Harris was able to be sourced – one Consent instance. They only asked for consents issued for small and medium scale equipment (up to 50MW for gas, and 2.5MW for coal) under rule 26.

Gisborne DC advises that "Our Council is currently implementing the Digitisation of Property Files Project where our physical data will be scanned and made available electronically.

There are 90,000 physical property files to be scanned and these are stored at an Archive Storage Facility in Auckland.

Therefore an online register service or online map with Resource Consent Data is currently not available until we have completed this project.

However if you have a specific list of consents that you wish to request information for, we can assist you with that."

<u>Nelson</u>

Used Natural Resource Permits

Consent Type = RDA and Status = DN or VDN.

Holdername was not supplied.

Many consents were not supplied with a coordinate so LINZOwner and LINZAddress were not able to be determined. Some consents are districtwide, mobile or along the SH so do not warrant a point, address or owners

Used Alex Harris data for power, fuel and rate where available

Wellington

Used Resource Consents data

"gwsde_nztm.SDEADMIN.CONSENTS_ALL.RC_APT_DESC" = 'DP - DISCHARGE TO AIR' AND "gwsde_nztm.SDEADMIN.CONSENTS_ALL.RCstatus" = 'Granted'

Used Alex Harris data for power, fuel and rate where available

Southland

Used Current Resource Consents

"Status" = 'Current' AND "Subtype" = 'To Air'

Descriptions were generally lacking in combustion fuel type.

Holder Address was extracted from Alex Harris for Heat and Combustion activities only.

Manawatu Wanganui

Used Regulatory Activity Point data

"ATH_STATE" = 'Authorised Activity' AND "ATH_SUBTYPE" = 'Air' AND "ATH_NAME" IN ('Air Emissions', 'Ashhurst Municipal Wastewater Treatment Plant Emissions', 'Biofuel Boiler Air Discharge', 'Boiler & Drying Kiln Emissions', 'Casein Plant Emissions', 'Coal Fired Boiler Air Discharge', 'Coal Fired Boiler Discharge', 'Crematorium Emissions', 'Diesel Fired Burner Discharge', 'Gas Fired Boiler Discharge', 'Gas Fired Steam Boiler Contaminant Discharge', 'Grain Processing Emissions', 'Incinerator Emissions', 'Lamb & Beef Rendering Plant Emissions', 'Milk Powder Processing Emissions', 'Mobile Asphalt Operation', 'Oil Fired Burner Discharge', 'Pahiatua WWTP Air Emissions', 'Timber Treatment Processing Emissions', 'Used Lubricant Oil Refining Emissions', 'Wastewater Treatment Plant Emissions', 'Wood Fired Boiler Discharge', 'Wood Fired Boiler Emissions')

Used Alex Harris data for power and fuel where available

West Coast

Used Consent Points data

"ActivitySu" = 'Contaminants to Air'

Used Alex Harris data for power, fuel and rate where available

<u>Auckland</u>

Used OAS Consent Discharge data

"ACTIVITY" = "Discharge To Air"

It only covers the period up to 31/3/2017 but is comprehensive

AucklandA

Used AC Consent Discharge data with subsequently XY coordinates

"ApplicationSubType" = 'To Air' AND "ConsentDecision" = 'Granted'

Missing Holdername, Address/Location and Expiry Date

Poor or missing Description

Incomplete IssuedDate so used DecisionDate

Different Consent ID to Auckland

Covers the period 2000-2020 so there will be overlap with Auckland

Waikato

Used Auth Active Resource Consent data

"STATUS" = 'Current' AND "ACTIVITYTY" = 'Discharge Permit' AND "ACTIVITYSU" IN ('Air - dust', 'Air - NES', 'Air - odour', 'Air - other', 'Discharge to air')

Northland

Used Resource Consents Point

"CurrentSta" = 'Current' AND "ActivityTy" = 'Air Discharge'

Limited fuel type classifications as the Description information available was limited

Bay Of Plenty

Used Current Consents data

"Category" = 'Air'

Tasman

Used supplied Consents data

"consent_type_details" = 'Discharge - Air'

Used Alex Harris data for description and fuel types where available

Hawkes Bay

Used Discharge Consents data

"Activity_1" = 'Air'

Holdername was not supplied, but another source was located

Marlborough

Used Resource Consents data

"ConsentSta" = 'Active' AND "ConsentTyp" = 'Discharge Permit - to Air'

Otago

Used Discharge To Air consents data

"ConsentStatus" = 'Current'

Summary of Council Consent supply performance

Generally Councils have their Consents data available in an Open Data Portal. Canterbury is the best for Open Data and comprehensiveness of data attributes, and was used as the template for the data supplied and what was requested of Councils.

Some Councils supplied additional attributes in their Open Data Portal and so enhanced the public availability of data - Marlborough, Hawkes Bay.

The only Council with no digital data was Gisborne who are in the process of digitising their Consents.

The only Council who supplied incomplete data was Auckland who could not supply full details Consents issued since 2017!!

The only Council who insisted on charging for data was Auckland, who claims that their data is difficult to access since the amalgamation. How many years does it take for the amalgamation to be completed? Why should requestors pay for Council inadequacy?

The Councils who refused to supply Holdername were Nelson, and Hawkes Bay who cited Privacy concerns.

So overall, Councils have been open and helpful with the exception of Auckland and Hawkes Bay. This project has provided an interesting case study to take to the Ombudsman.

In the end we have been able to glean most combustion emission sources, not just coal. This has provided a national stocktake that should be useful for the overall national carbon emissions conversation. National work is required to require all Councils to create specific data that documents all carbon emissions authorised by Consents, not just combustion (there are many landfill and oil well raw gas emissions).
