

Generation update – September 2015

This document was prepared using information available in the public domain; it does not use any material supplied by generators under confidentiality. All information presented is subject to uncertainty and will change as more data comes to light.

The document comprises the following tables:

- Table 1 presents a high level summary of the current generation projects sorted by status, owner, generation type and region;
- Table 2 shows the same list of projects, sorted by earliest possible commissioning date;
- Table 3 lists the details of the projects which are currently under construction, or have received consent, or applied for consent, sorted by generation type; and
- Figures 1-6 plot the data presented in Tables 2 and 3.

Generation projects with capacity less than 5 MW are not shown. Where ranges are provided for capacity, median values are used for statistical purposes.

It should be borne in mind that some types of new projects (particularly thermal peakers) can be consented and constructed relatively rapidly. The projects listed in this document, therefore, should not be seen as an exhaustive list of all generation that could be constructed in the next few years.

Tables 2 and 3 show the projects deemed “consent under appeal” in Table 1. The projects are divided into two groups, those declined resource consent prior to appeal and those approved resource consent prior to appeal.

Anyone who would like to provide updated information may contact emi@ea.govt.nz with "Generation projects" in the subject line.

Status

Under construction	0
Consented	4800
Consent under appeal	7
Applied for consent	297

Owners

Contact Energy	1327
Meridian Energy	761
TrustPower	538
Genesis	0
Mighty River Power	462
Others	2016

Generation types

Geothermal	347
Hydro	513
Wind	3041
Diesel	23
Marine	200
Gas	980

Regions

Northland	250	Marlborough	70
Auckland	898	West Coast	106
Waikato	852	Canterbury	460
Bay of Plenty	47	Waitaki	0
Hawkes Bay	433	Otago	188
Taranaki	100	Southland	240
Manawatu	428	Fiordland	0
Wellington	1032	Tiwai	0

Total Capacity	5104
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Table 1. Summary of potential projects: capacities in MW

Generation type	Region	Location / Name of Project	Owned by	Capacity (MW)	Earliest commission date	Status	Notes
Hydro	Otago	Hawea Control Gate Retrofit	Contact Energy	17	2016	Consented	
Wind	Manawatu	Central Wind (Moawhango)	Meridian Energy	120-130	2016	Consented	
Geothermal	Waikato	Tauhara II	Contact Energy	250	2020	Consented	
Hydro	Otago	Upper Fraser	Pioneer Generation	6.5	2020	Applied for consent	
Diesel	Canterbury	Belfast	Orion	11.5	2016-2020	Consented	
	Canterbury	Bromley	Orion	11.5	2016-2020	Consented	
Gas	Auckland	Otahuhu C	Contact Energy	400	2016-2020	Consented	Otahuhu plant is closed down
	Auckland	Rodney	Genesis Energy	480	2016-2020	Consented	Genesis Energy will not progress the project
	Taranaki	Junction Road	Nova Energy	100	2016-2020	Consented	
Geothermal	Bay of Plenty	Rotoma	Rotoma No. 1 Corporation	35	2016-2020	Applied for consent	
Hydro	Canterbury	Rakaia River	Ashburton Com. Water Trust	16	2016-2020	Consented	
	Canterbury	Lake Pukaki	Meridian Energy	35	2016-2020	Consented	
	Canterbury	North Bank Tunnel	Meridian Energy	200-280	2016-2020	Applied for consent	
	Canterbury	Balmoral Hydro	Meridian Energy	15	2016-2020	Applied for consent	
	Marlborough	Wairau	TrustPower	70.5	2016-2020	Consented	
	West Coast	Stockton Plateau	Hydro Developments Ltd.	25	2016-2020	Consented	
	West Coast	Stockton Mine	Solid Energy	35	2016-2020	Consented	
	West Coast	Arnold (Dobson)	TrustPower	46	2016-2020	Consented	
Wind	Auckland	Awhitu	TrustPower	18	2016-2020	Consented	
	Canterbury	Mt Cass	MainPower	41-69	2016-2020	Consented	
	Canterbury	Hurunui	Meridian Energy	76	2016-2020	Consented	
	Hawkes Bay	Maungaharuru	Meridian Energy	270	2016-2020	Consented	
	Manawatu	Turitea	Mighty River Power	303	2016-2020	Consented	
	Otago	Mahinerangi Stage 2	TrustPower	164	2016-2020	Consented	
	Southland	Kaiwera Downs	TrustPower	240	2016-2020	Consented	
	Waikato	Hauāuru mā raki	Contact Energy	504	2016-2020	Consented	Contact Energy will not progress the project
	Waikato	Taharoa	Taharoa	54	2016-2020	Consented	
	Waikato	Taumatatorara	Ventus	44	2016-2020	Consented	
	Wellington	Castle Hill	Genesis Energy	860	2016-2020	Consented	
	Wellington	Puketoi	Mighty River Power	159	2016-2020	Consented	
	Wellington	Long Gully	Windflow Technologies	12.5	2016-2020	Consented	
Geothermal	Northland	Ngawha expansion	Top Energy	50	2017-2020	Consented	
Hydro	Hawkes Bay	Ruataniwha Plains	Hawkes Bay Regional Inv Co	6.5	2017-2020	Consent under appeal	
Marine	Northland	Kaipara Harbour pilot	Crest Energy	200	2017-2020	Consented	
Wind	Hawkes Bay	Waitahora	Contact Energy	156	2017-2020	Consented	
Geothermal	Bay of Plenty	Te Ahi O Maui	Eastland Group	12.5	2018-2020	Consented	

Table 2. Projects which are currently under construction, have received consent or have applied for consent – sorted by earliest date

Generation type	Region	Location / Name of Project	Owned by	Capacity (MW)	Earliest commission date	Status	Notes
Diesel	Canterbury	Belfast	Orion	11.5	2016-2020	Consented	
	Canterbury	Bromley	Orion	11.5	2016-2020	Consented	
Gas	Auckland	Otahuhu C	Contact Energy	400	2016-2020	Consented	Otahuhu plant is closed down
	Auckland	Rodney	Genesis Energy	480	2016-2020	Consented	Genesis Energy will not progress the project
	Taranaki	Junction Road	Nova Energy	100	2016-2020	Consented	
Geothermal	Bay of Plenty	Te Ahi O Maui	Eastland Group	12.5	2018-2020	Consented	
	Bay of Plenty	Rotoma	Rotoma No. 1 Corporation	35	2016-2020	Applied for consent	
	Northland	Ngawha expansion	Top Energy	50	2017-2020	Consented	
	Waikato	Tauhara II	Contact Energy	250	2020	Consented	
Hydro	Canterbury	Rakaia River	Ashburton Com. Water Trust	16	2016-2020	Consented	
	Canterbury	Lake Pukaki	Meridian Energy	35	2016-2020	Consented	
	Canterbury	North Bank Tunnel	Meridian Energy	200-280	2016-2020	Applied for consent	
	Canterbury	Balmoral Hydro	Meridian Energy	15	2016-2020	Applied for consent	
	Hawkes Bay	Ruataniwha Plains	Hawkes Bay Regional Inv Co	6.5	2017-2020	Consent under appeal	
	Marlborough	Wairau	TrustPower	70.5	2016-2020	Consented	
	Otago	Hawea Control Gate Retrofit	Contact Energy	17	2016	Consented	
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	Wellington	Long Gully	Windflow Technologies	12.5	2016-2020	Consented	

Table 3. Projects which are currently under construction, have received consent or have applied for consent – sorted by generation type

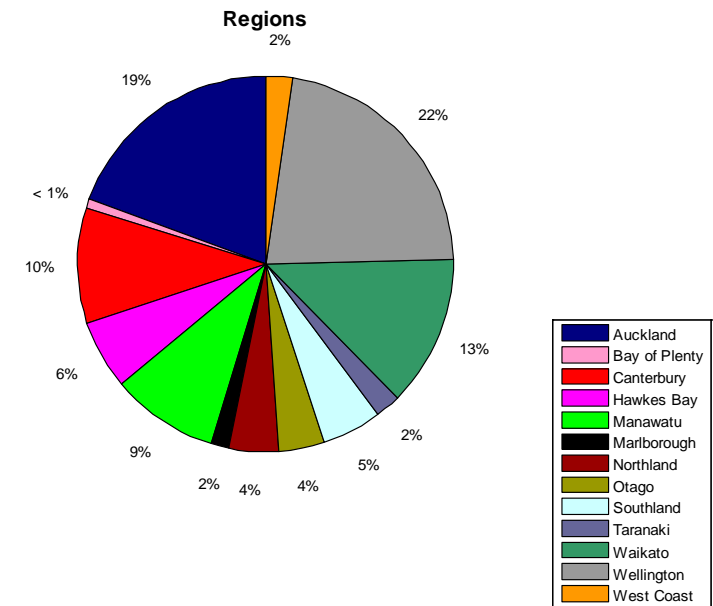
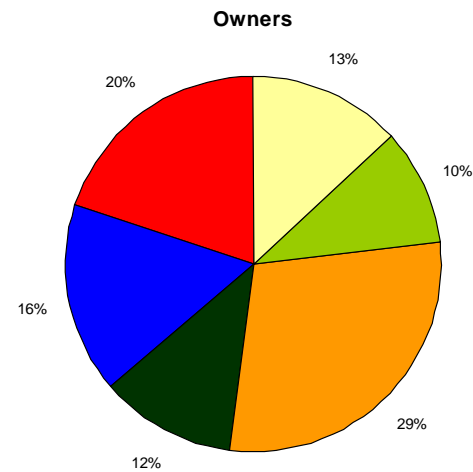
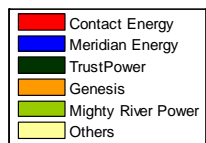
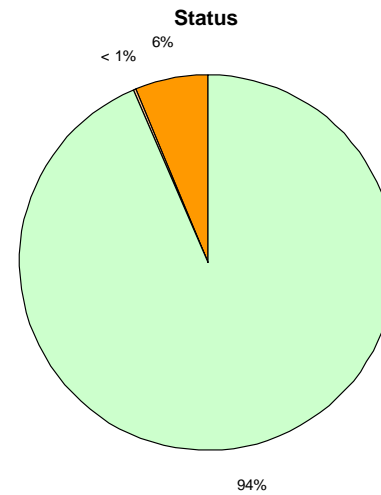
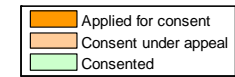
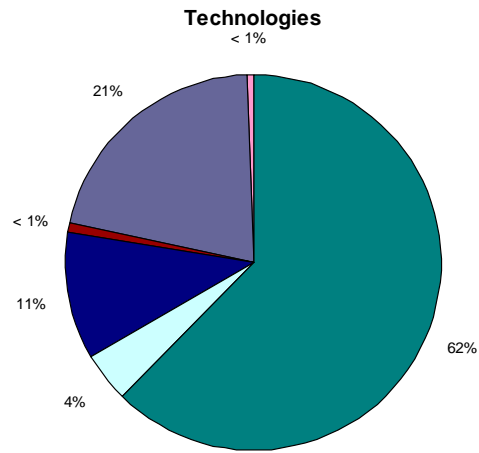
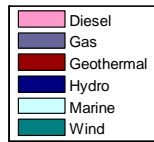


Figure 1. Summary of capacity (MW) percentage by technology, status, owner and region

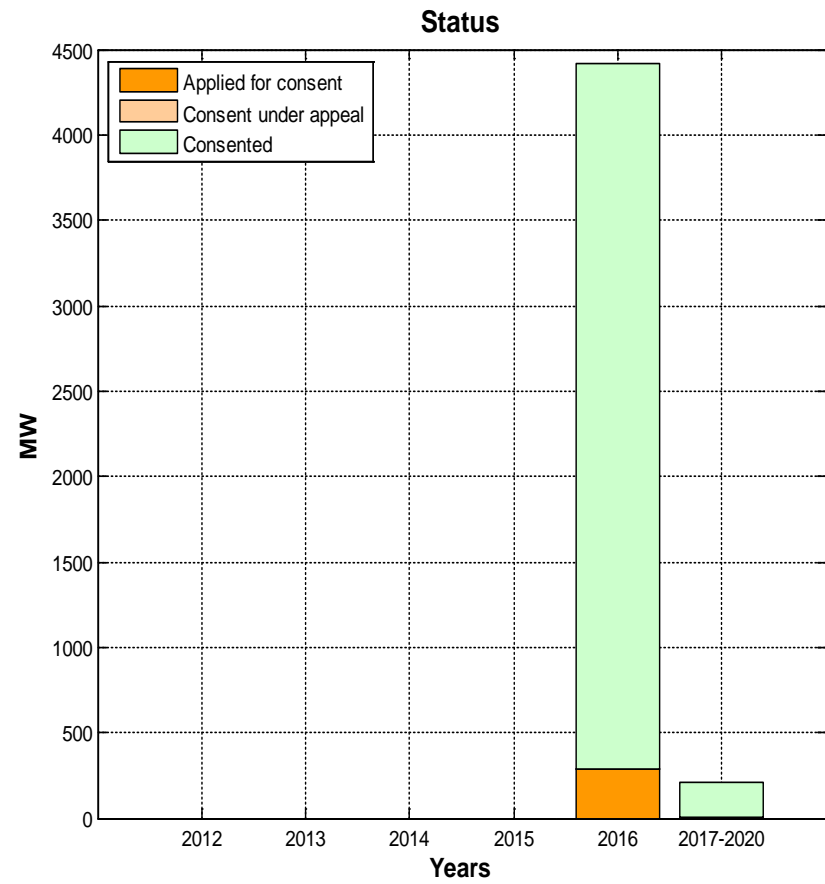
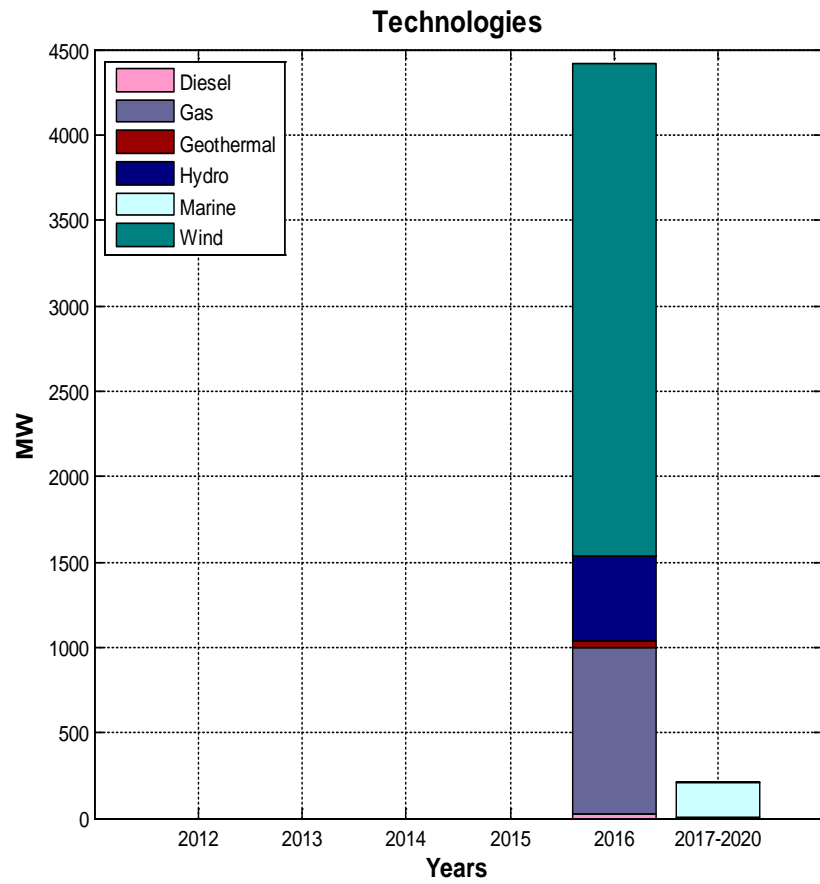


Figure 2. Summary of capacity (MW) technology and status

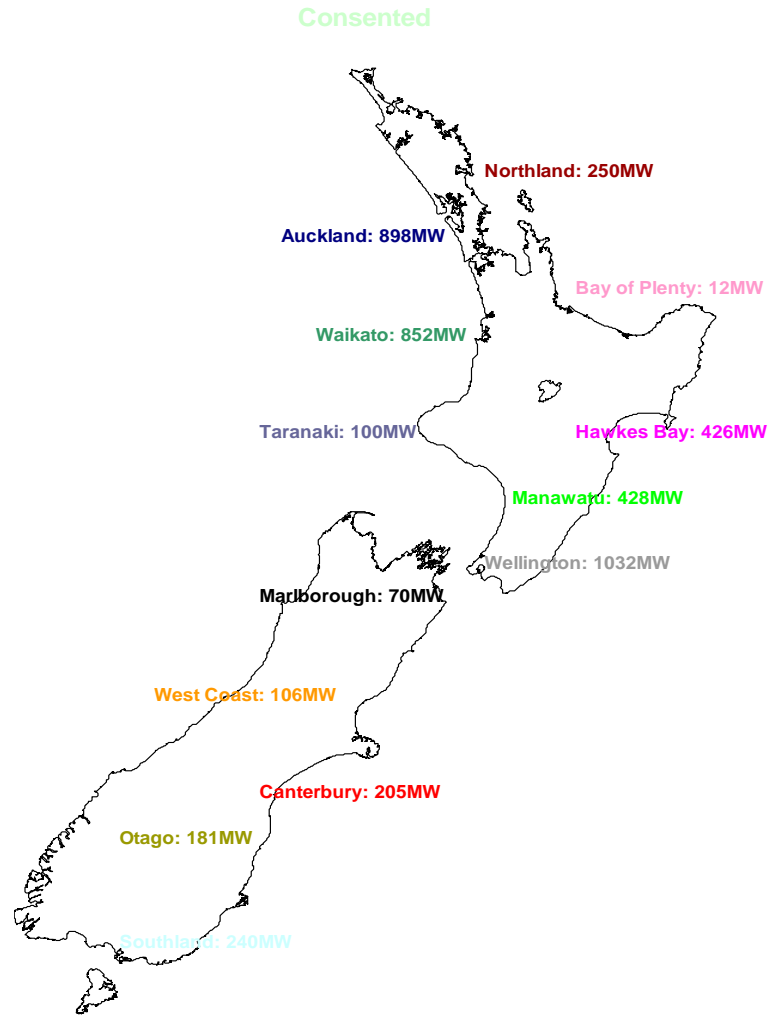


Figure 3. Sum of the “Consented” project capacities by region

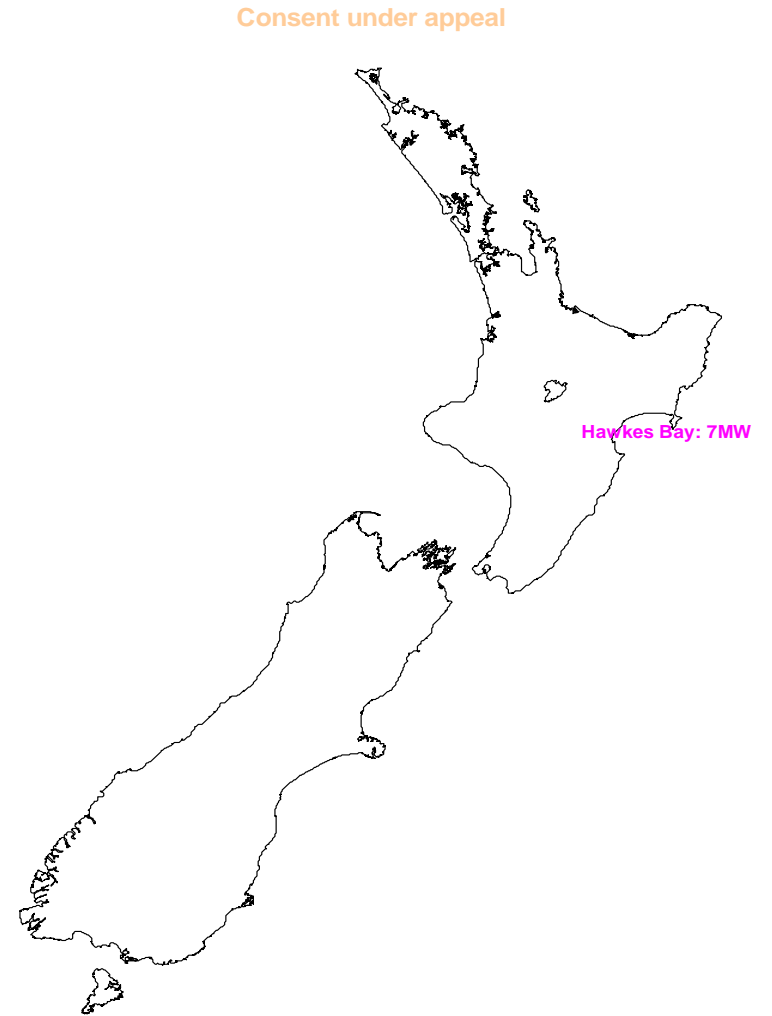


Figure 4. Sum of the “Consent under appeal” project capacities by region

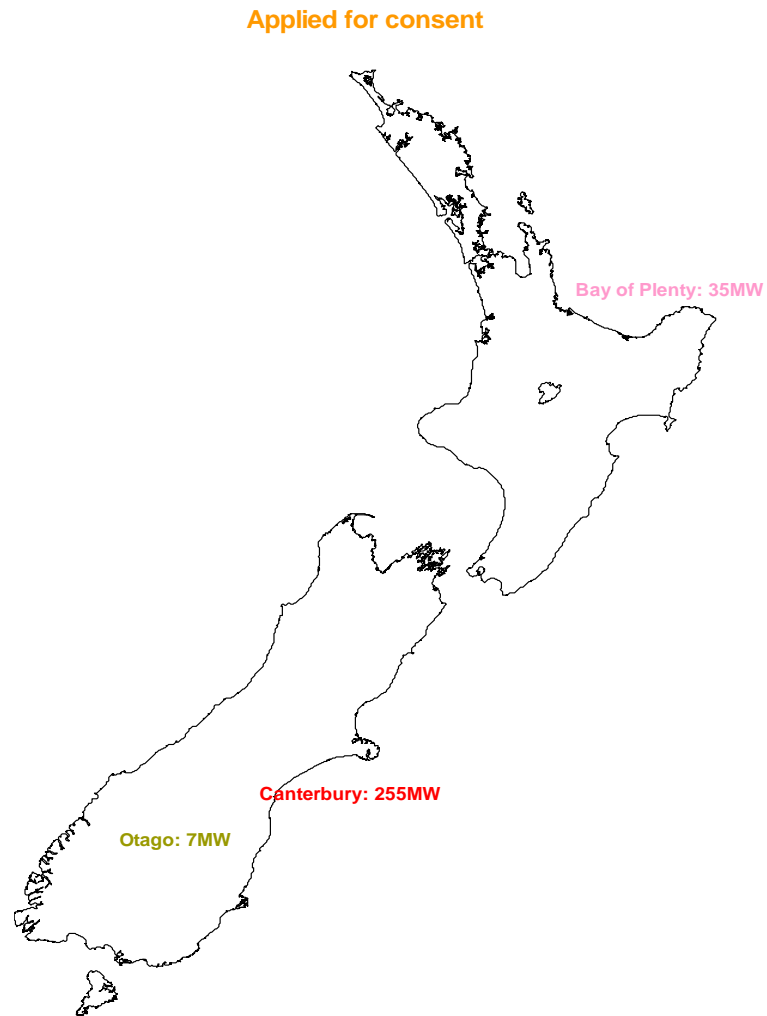


Figure 5. Sum of the “Applied for consent” project capacities by region