## **Generation update – June 2014**

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 <u>emi@ea.govt.nz</u> with "Generation projects" in the subject line.

## Status

Status	
Under construction	60
Consented	4443
Consent under appeal	315
Applied for consent	297

## Owners

Contact Energy	1327
Meridian Energy	821
TrustPower	538
Genesis	1340
Mighty River Power	462
Others	627

## Generation types

Geothermal	297
Hydro	506
Wind	3108
Diesel	23
Marine	201
Gas	980

Northland	200	Marlborough	70
Auckland	898	West Coast	106
Waikato	852	Canterbury	460
Bay of Plenty	47	Waitaki	0
Hawkes Bay	433	Otago	181
Taranaki	100	Southland	247
Manawatu	428	Fiordland	0
Wellington	1093	Tiwai	0

Table 1. Summary of potential projects: capacities in MW

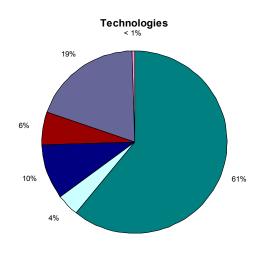
Generation type	Region	Location / Name of Project	Owned by	Capacity (MW)	Earliest commission date	Status
Hydro	Otago	Hawea Control Gate Retrofit	Contact Energy	17	2014	Consented
Wind	Wellington	Mill Creek	Meridian Energy	60	2014	Under construction
Marine	Northland	Kaipara Harbour pilot	Crest Energy	200	2015	Consented
	Wellington	Cook Strait Marine Energy pilot	Neptune Power	1 (pilot)	2015	Consented
Wind	Manawatu	Central Wind (Moawhango)	Meridian Energy	120-130	2015	Consented
Gas	Auckland	Rodney	Genesis	480	2016	Consented
Wind	Hawkes Bay	Waitahora	Contact Energy	156	2016	Consented
Gas	Taranaki	Junction Road	Nova Energy	100	2015-2020	Consented
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
Geothermal	Bay of Plenty	Te Ahi O Maui	Eastland Group	12.5	2016-2020	Consent under appeal
	Bay of Plenty	Rotoma	Rotoma No. 1 Corporation	35	2016-2020	Applied for consent
	Waikato	Tauhara II	Contact Energy	250	2016-2020	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
	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	Consent under appeal
	Otago	Mahinerangi Stage 2	TrustPower	164	2016-2020	Consented
	Southland	Flat Hill	Energy 3	7	2016-2020	Consented
	Southland	Kaiwera Downs	TrustPower	240	2016-2020	Consented
	Waikato	Hauāuru mā raki	Contact Energy	504	2016-2020	Consented
	Waikato	Taharoa	Taharoa	54	2016-2020	Consented
	Waikato	Taumatatorara	Ventus	44	2016-2020	Consented
	Wellington	Castle Hill	Genesis	860	2016-2020	Consented
	Wellington	Puketoi	Mighty River Power	159	2016-2020	Consented
	Wellington	Long Gully	Windflow Technologies	12.5	2016-2020	Consented
Hydro	Hawkes Bay	Ruataniwha Plains	Hawkes Bay Regional Inv Co	6.5	2017-2020	Applied for consent

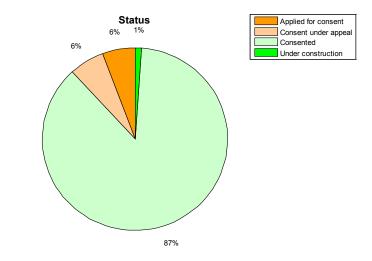
Table 2. Projects which are currently under construction, have received consent or have applied for consent – sorted by earliest date

Generation type	Region	Location / Name of Project	Owned by	Capacity (MW)	Earliest commission date	Status
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
	Auckland	Rodney	Genesis	480	2016	Consented
	Taranaki	Junction Road	Nova Energy	100	2015-2020	Consented
Geothermal	Bay of Plenty	Te Ahi O Maui	Eastland Group	12.5	2016-2020	Consent under appeal
	Bay of Plenty	Rotoma	Rotoma No. 1 Corporation	35	2016-2020	Applied for consent
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	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	Applied for consent
	Marlborough	Wairau	TrustPower	70.5	2016-2020	Consented
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	Wellington	Puketoi	Mighty River Power	159	2016-2020	Consented
	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







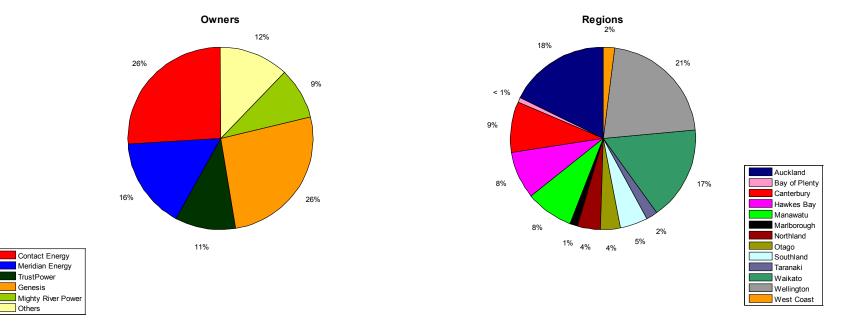


Figure 1. Summary of capacity (MW) percentage by technology, status, owner and region

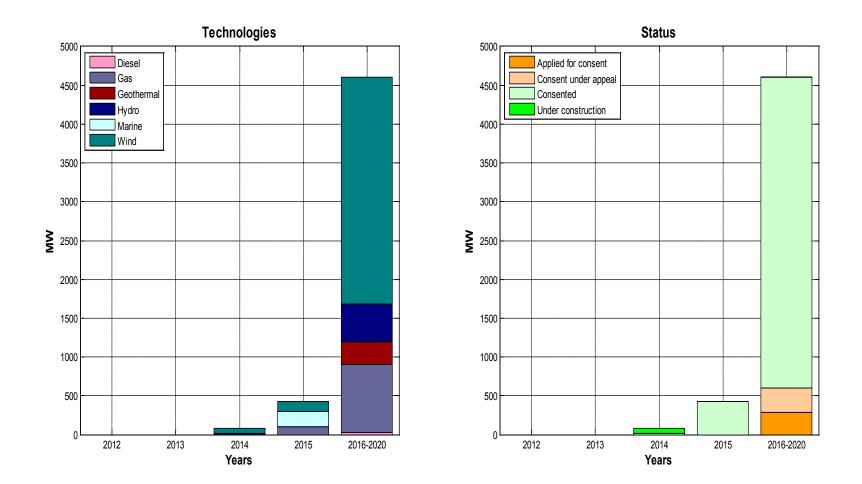
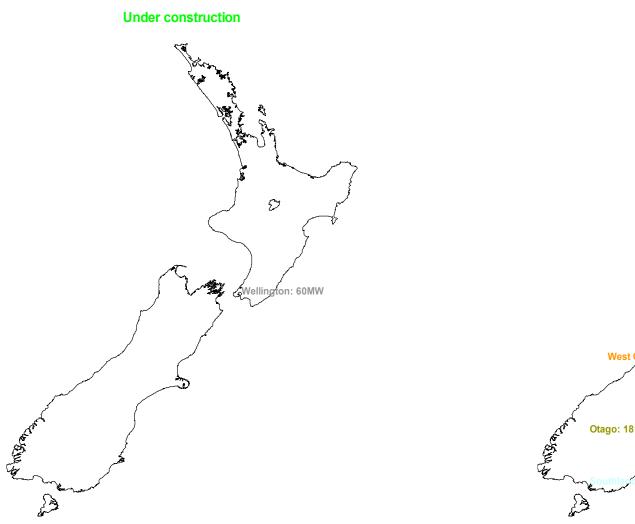


Figure 2. Summary of capacity (MW) technology and status



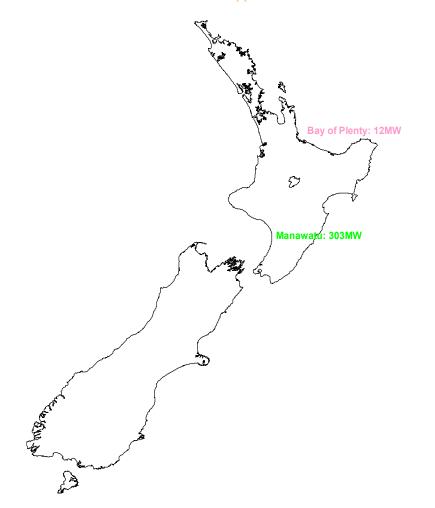
Northland: 200MW Auckland: 898MW Waikato: 852MW Ð kes Bay: 426MW Taranaki: 100MW Manawatu: 125MW Wellington: 1033MW Marlborough: 70MW, st: 106MW West Co Canterbury: 205MW Otago: 181MW

Figure 3. Sum of the "Under construction" project capacities by region

Figure 4. Sum of the "Consented" project capacities by region

Consent under appeal





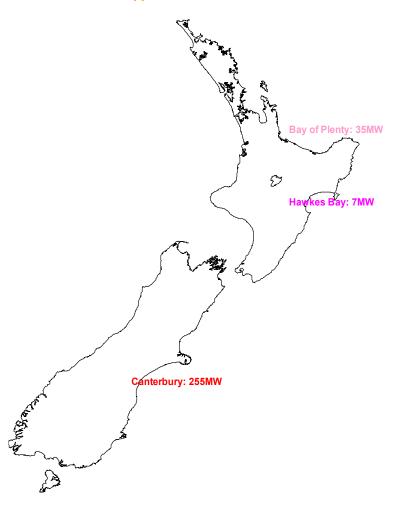


Figure 5. Sum of the "Consent under appeal" project capacities by region

Figure 6. Sum of the "Applied for consent" project capacities by region