

Generation update – March 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 | 7 |
| Consented | 4435 |
| Consent under appeal | 322 |
| Applied for consent | 290 |

| Owners | |
|--------------------|------|
| Contact Energy | 1327 |
| Meridian Energy | 761 |
| TrustPower | 538 |
| Genesis | 1340 |
| Mighty River Power | 462 |
| Others | 626 |

| Generation types | |
|-------------------|-------------|
| Geothermal | 297 |
| Hydro | 506 |
| Wind | 3048 |
| Diesel | 23 |
| Marine | 200 |
| Gas | 980 |

| Regions | | | |
|----------------------|-------------|--------------------|------------|
| 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 | 1032 | Tiwai | 0 |

| | |
|-----------------------|-------------|
| Total Capacity | 5054 |
|-----------------------|-------------|

Table 1. Summary of potential projects: capacities in MW

| Generation type | Region | Location / Name of Project | Owned by | Capacity (MW) | Earliest commission date | Status |
|-----------------|---------------|-----------------------------|----------------------------|---------------|--------------------------|----------------------|
| Wind | Manawatu | Central Wind (Moawhango) | Meridian Energy | 120-130 | 2016 | Consented |
| Gas | Auckland | Rodney | Genesis | 480 | 2016 | Consented |
| Hydro | Otago | Hawea Control Gate Retrofit | Contact Energy | 17 | 2016 | Consented |
| Wind | Hawkes Bay | Waitahora | Contact Energy | 156 | 2016 | 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 |
| | Taranaki | Junction Road | Nova Energy | 100 | 2016-2020 | Consented |
| Geothermal | Bay of Plenty | Te Ahi O Maui | Eastland Group | 12.5 | 2016-2020 | Consented |
| | 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 | Under construction |
| | 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 | Consent under appeal |
| Marine | Northland | Kaipara Harbour pilot | Crest Energy | 200 | 2017-2020 | 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 |
|-------------------|---------------|-----------------------------|----------------------------|---------------|--------------------------|----------------------|
| 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 | 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

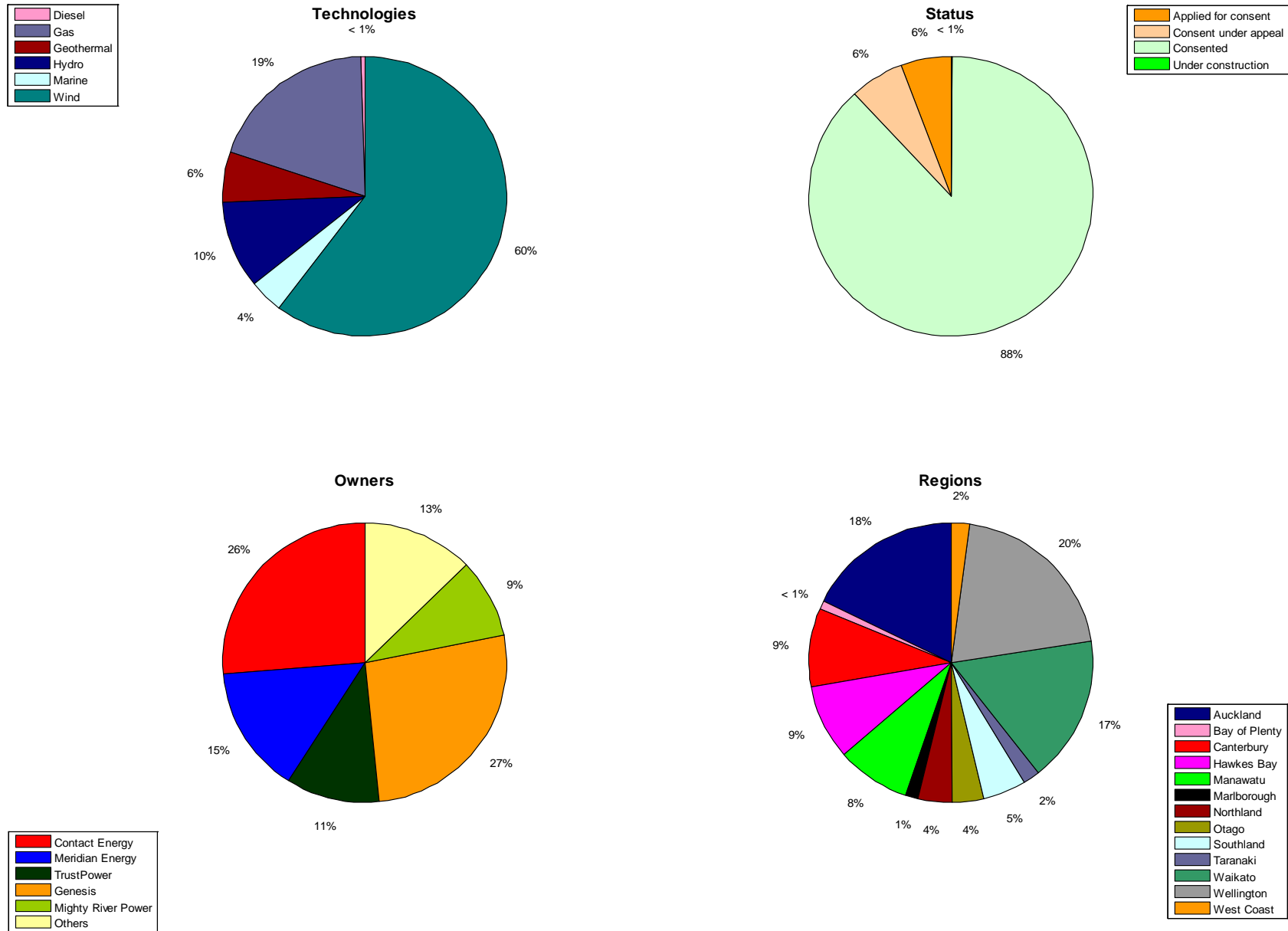


Figure 1. Summary of capacity (MW) percentage by technology, status, owner and region

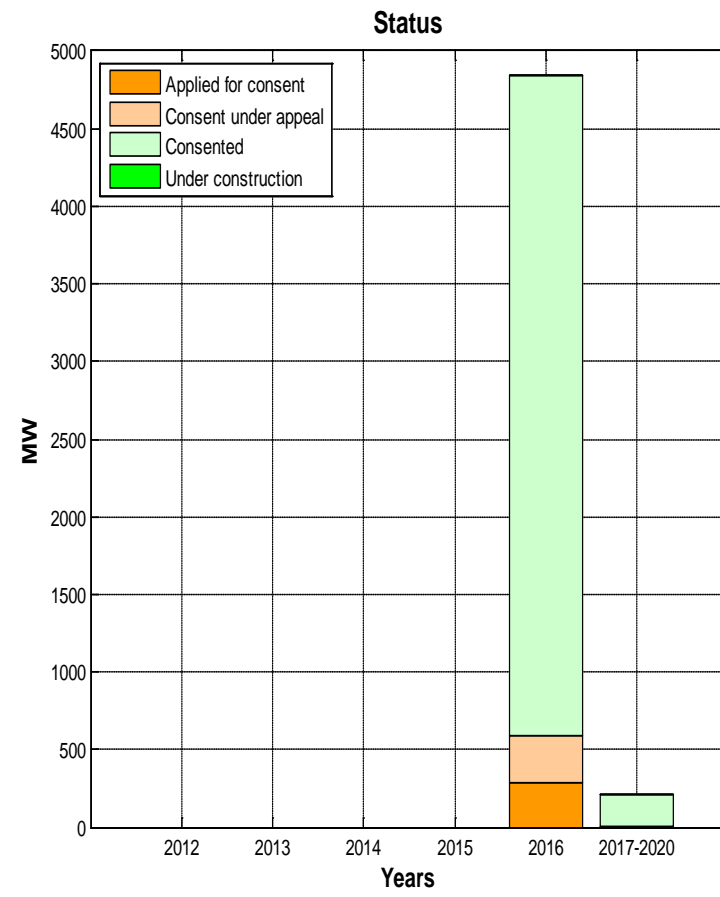
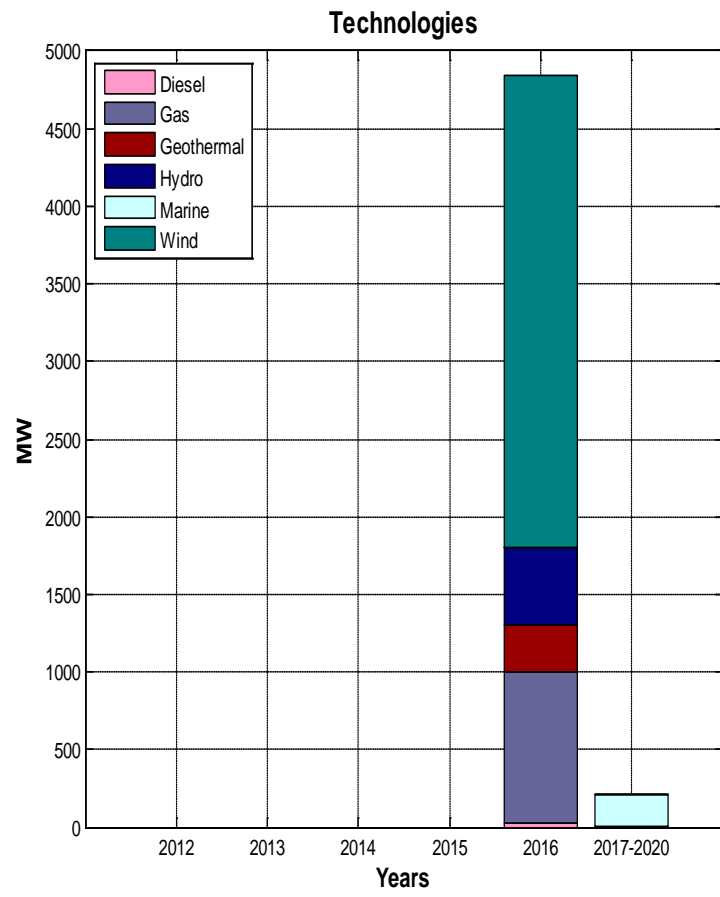


Figure 2. Summary of capacity (MW) technology and status

Under construction



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

Consented

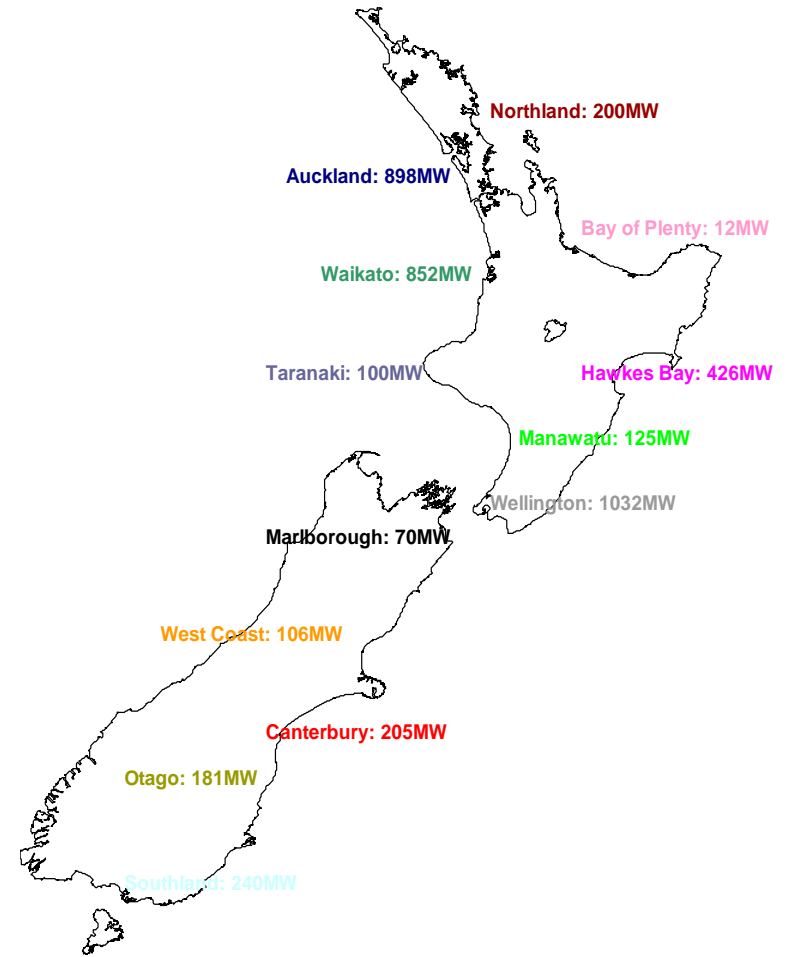


Figure 4. Sum of the “Consented” project capacities by region

Consent under appeal

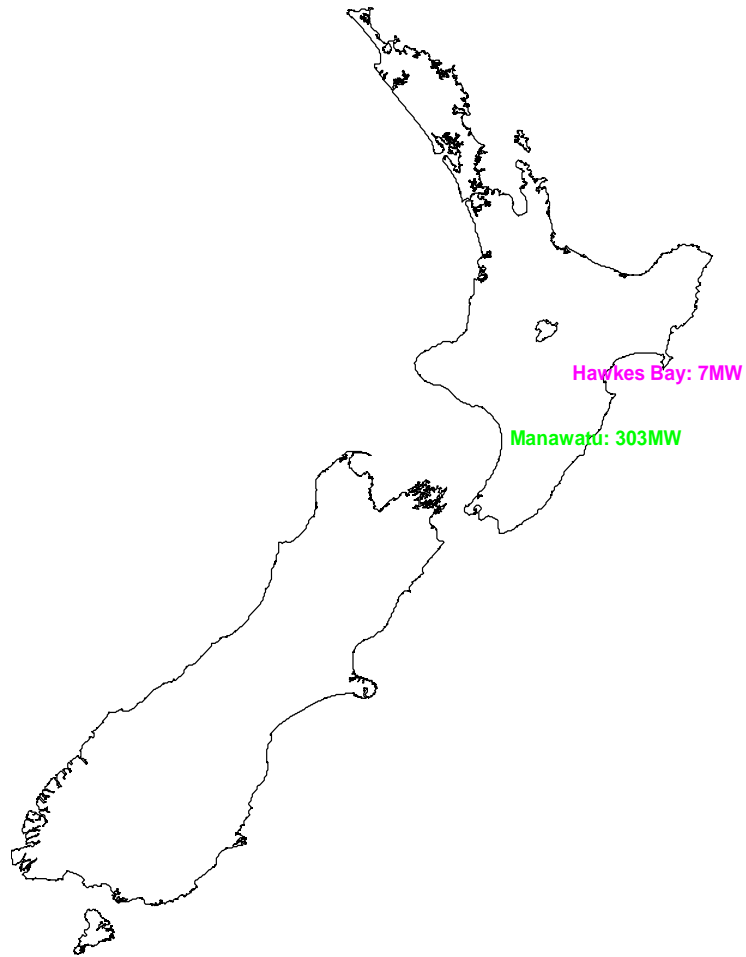


Figure 5. Sum of the “Consent under appeal” project capacities by region

Applied for consent

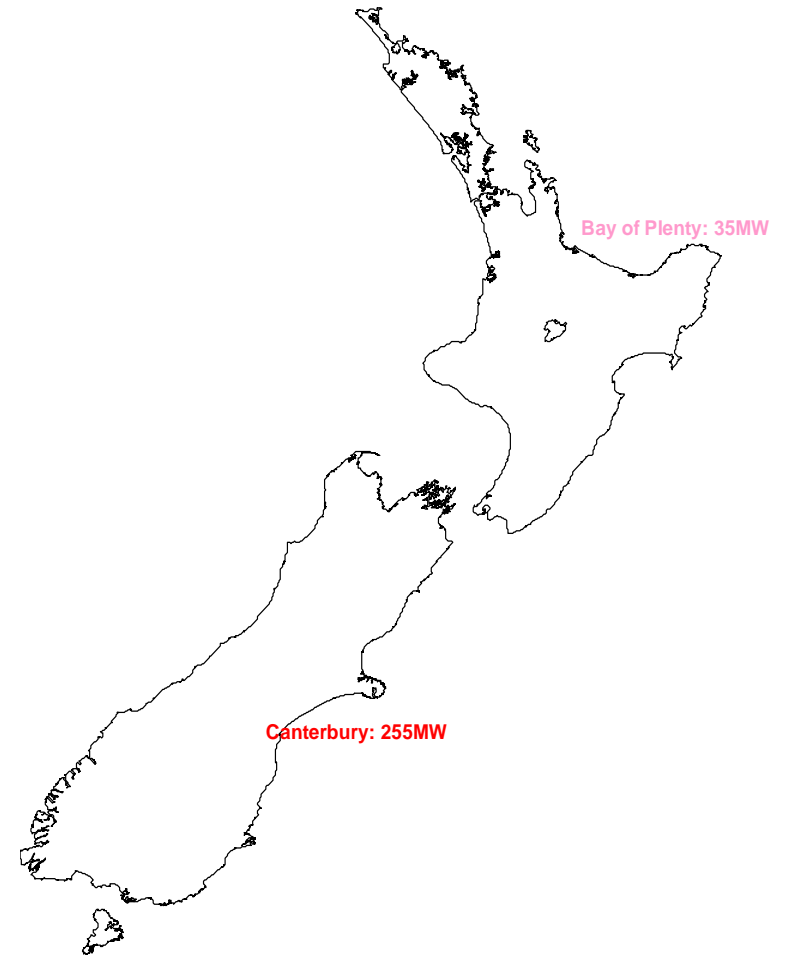


Figure 6. Sum of the “Applied for consent” project capacities by region