

# Advice on NZ ETS unit limits and price control settings for 2026-2030

April 2025

# HAERE MAI · WELCOME

# This advice is required under section 5ZOA of the Climate Change Response Act 2002

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#### **Disclosure statement**

As anticipated by the appointment criteria, the Climate Change Commissioners come from varying fields such as adaptation, agriculture, economics, te ao Māori and the Māori-Crown relationship. While a number of board members continue to hold roles within these fields, our advice is independent and evidence based. The Commission operates under its Interests Policy, which is derived from the Crown Entities Act 2004. You can read more about our board members on the Climate Change Commission website. The Commission regularly updates and publishes on its website a register of relevant board interests.

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# About He Pou a Rangi Climate Change Commission

He Pou a Rangi Climate Change Commission (the Commission) is an independent Crown entity established by the Climate Change Response Act 2002 (the Act) to:

- a. provide independent, evidence-based advice to successive governments on mitigating climate change (including through reducing emissions of greenhouse gases) and adapting to the effects of climate change
- b. monitor and review progress towards emissions reduction and adaptation.

In carrying out these roles, the Act requires the Commission to draw from the best available evidence and analysis, and to consider the impacts of climate change and the implications for Aotearoa New Zealand over time. The Act also directs us to consider the Crown–Māori relationship, te ao Māori, and specific effects on iwi/Māori in our work.

The Commission's impartial advice focuses on the outcomes that can result from government action and policy, and the choices that decision-makers have. The aim is to support the Government to fulfil its role under the Act, including achieving emissions budgets and the 2050 target, and allowing the people of Aotearoa New Zealand to prepare for, and adapt to, the effects of climate change.

The scope and timeframes for the Commission's advice and monitoring reports are set out in the Act. More information about the Commission's work programme can be found on our website, www.climatecommission.govt.nz.

# Te whakarākei matua

Ko tō mātou kupu akiaki ā tau tēnei ki te Kāwanatanga mō te herenga hokohoko me te ritenga taura-utu ki te Kaupapa Hokohoko Tukunga o Aotearoa.

Ko te Kaupapa Hokohoko Tukunga (NZ ETS) te tūāpapa ki te rauemi tukanga hei whakaheke i ngā tukunga rehukino kei te nuku o te whenua.

Ko tā Te Komihana o He Pou a Rangi he tuku i te kupu akiaki o te tau ki tō te kaupapa hokohoko herenga hokohoko me ngā whakaritenga taura-utu (NZ ETS ritenga), arā atu i ngā panonitanga ka hiahia ki te tautoko i ngā ahunga whakaheke tukuwaro.<sup>i</sup>

Ko tēnei te tau tuawhā o tā te Komihana hoatu he kupu akiaki ki ngā ritenga NZ ETS. Ko tēnei kupu akiaki he tautoko i ngā ritenga ki ngā tau 2026–2030.

## Te whakapau kaha o te Kaupapa Hokohoko ki ngā ahunga whakaheke tukuwaro

He tauwhanga hokohoko a NZ ETS i hangaia hei whakapoapoa i ngā whakahekenga rehukino. Hei tā te Kaupapa Hokohoko he whai i ngā tukuwaro nō ia ahumahi o te ōhanga o Aotearoa, hāunga rā ahuwhenua.<sup>ii</sup> Ko tā te kaupapa he haumaru i te koni i te haurua o o tukuwaro ki tō tātou whenua nei.

Mā te whakahere i te nui o ngā tukuwaro kua whakaaetia ki te Kaupapa, ka ūtaina he utu ki ngā tukuwaro, inā hoki h hanga i ētahi tahua whakapoapoa i ngā pakihi, i ngā kaiutu, i ngā kaipupuru whenua, i ngā kaihokohoko hoki ki te whai i ngā kōwhiringa ka whakaheke tukuwaro ana.

Mā raro iho i te kaupapa, ka whai i hunga ka uru ki te mākete ngā tauhoko (e kī nei ko 'Ngā Tauhoko o Aotearoa', ā, ki ia tauhokoka whai āheinga ki te tuku i te kotahi tōna o te hau CO<sub>2</sub>e. Ko tā te Kāwanatanga he tuku i ngā tauhoko mā ngā tukunga maha ki te mākete. Ka hanga i tētahi nama ki tauhokonga motuhake, mā te mahi hokohoko. Ka tohua ngā tauhoko ki ngā tūmahi (pēnei i te ahurākau) e unuhia me te whakatō waro. Ka tūtohua hoki ngā tauhoko ki ētahi ahumahi ('tūtohu tauhoko utu kore').

Ka puta ana ngā tauhoko tukuwaro ki te mākete, ka tāea e ngā kaiuru ki te hoko me te hoko atu ki waenga i a rātou anō. Mā tēnei, te kāwanatanga e whakatau i te nunui o ngā tauhoko ka wātea ana ki te kaiuru, engari kei te mākete te whakatau i te utu ki ngā tukuwaro me te āhua o te whakahekenga tukuwaro.

Ko te rahinga me ngā ritenga utu ki te mākete he rite ake i tō NZ ETS whakaritenga ki ngā tahua tukuwaro, te ahunga 2050, me ngā takohanga ā motu kei raro mai i Te Kawenata Parī.<sup>iii</sup>

<sup>&#</sup>x27; 'Ngā ahunga tukuwaro' ki tēnei kupu akiaki he mea aro ki ngā tahua tukuwaro, te ahunga 2050, me ngā Takohanga ā motu kei Te Kawenata o Parī.

<sup>&</sup>lt;sup>ii</sup> Kāhore a NZ ETS i te mau ki ngā tukuwaro koiora o te ahuwhenua. Ko ngā tukuwaro o te ngoi me te ahuwaka o ngā mahi a te ahuwhenua ka noho tonu ki te kaupapa hokohoko.

I te tau 2024 te whakahau a te Komihana i ngā āmenehana ki te ahunga 2050. Ko tēnei kupu akiaki ki a NZ ETS he aro ki te ahunga 2050 o te wā kei te Ture Urupare ki Te Āhuarangi 2002.

<sup>4</sup> He Pou a Rangi Climate Change Commission | Advice on NZ ETS unit limits and price control settings for 2026–2030

## Ngā tohutohu mā ngā mana-nui

### Te horopaki ki tō mātou kupu akiaki

- Mai i tō mātou kupu akiaki o 2024 ko te tatau ki ngā tauhemihemi kei te mākete kua hekea rawatia, e ai tā ngā matapae ō mua.
- Ko te mahere whakaheke tukuwaro tuarua he hiki i tō te Kāwanatanga takohanga ki tētahi NZ ETS whai mana hei rauemi matua ki te whakaheke i ngā tukuwaro ā-motu.
- Kua piki te māia o te mākete ki te NZ ETS engari kei te whakaraerae tonu. Hei tā tēnei kupu akiaki he tautoko i tētahi mākete whai mana, he mārama rawa tō matapae, ka mutu, he mākete tau.
- Ko ētahi wāhanga o te pohēhē kei reira tonu, pēnei i to mātou whenua anga ki te tutuki i ngā tahua tukuwaro 2031–2035.
- Ko tō mātou kupu akiaki he aro ki te whakapūmau i te herenga hokohoko me te ritenga taura-utu, kia tākai tahi, ka mutu, he hāngai ki ngā ahunga whakaheke tukuwaro a te Kāwanatanga.

### Te kupu akiaki ki ngā herenga hokohoko Te kupu ki ngā ritenga taura-utu

- Ko ngā whakahekenga tuatahi ki te tau hemihemi he tohu ka taea te hanga tauhoko anō mō te mākete, ā, kāhore tonu i ngā matapae tuatahi, me te hāngai tonu ki ngā tahua whakaheke tukuwaro.
- E whakahau ana kia kaua e rerekē ngā rahinga hokohoko o 2026 me 2027. Ki tō mātou aromatawai, kāhore e tika ana kia rerekē ngā ritenga o 2026 me 2027.
- Ko ngā rahinga hokohoko hou ka taea te tuku ki ngā 2028–2030, engari me tika tonu ngā utu kaupare. Mā te tuku i nga rahinga hou ka mana rānei te pīngore ki te whakarerekē i ngā panonitanga ki te matapae hemihemi, ki ngā tukuwaro rānei.

- I whakahaungia ko ngā tohu utu ki te utu mākete tauraro (ARP) me te utu here tauraro (CCR) kia noho tonu ki ngā reanga o nāianei, engari tuituia anake mō te weranga utu.
- Ko ngā ritenga o te wā he rite tonu ki tō te Kāwanatanga ahunga whakaheke tukuwaro, e whakahere nei i ngā taunakitanga o te wā. Ko te taunga o te mauri tētahi tino whakahiranga, tuia ko te māia tē māro ki te NZ ETS.
- Kāhore he taki ki te whakaheke i te ARP, ki te inamata me te anamata. Mēnā rā he whakahekenga ARP ka werohia ngā haumi o te wā me tōna tikanga ka aro ki te tutukinga o te tahua tukuwaro tukuwaro.
- E taea tonutia ana te ritenga hokohoko te pā ā ngā rā e tū mai nei, engari kei te tikanga o ngā momo mahinga ka rangona ki te whakaheke tukuwaro o roto i ngā tau e tū mai nei. Ka koke tonu ki te aromatawai me te arotake i ngā taunakianga nui nei tōna kumikumi me te whai he aha ngā mea hei tutuki i te tahua tukuwaro tuatoru kei tēnei kupu akiaki mō te tau.

# Te ia o ngā kōrero ki tēnei kupu akiaki

Mai i tō mātou kupu akiaki 2024 kua hua mai ngā panonitanga ki te tukanga Kāwanatanga me ngā āhuatanga mākete ka whai pānga ki te whakamahinga.

## Te hekenga o ngā tautoko hemihemi kei NZ ETS mai i tō mātou kupu akiaki 2024

Mō te āheinga o NZ ETS ki te tautoko tika i ngā whakahekenga i ngā rehukino, ko te tatau o ngā tauhoko ka wātea ana ki te whakamahi ki te kaupapa me heke hoki ki tō te taunga o ngā tahua tukuwaro

I te tau 2024 i tohua ko ngā nama ki ngā tauhoko ka wātea ana ki te mākete he mea tupu matomato i tō te tau kua horī, kātahi ka hua mai ngā tūraru ki te tutukinga o ngā tahua tukuwaro. I te waenga tau 2022 me te Hepetema 2023 ko tērā 'hemihemitanga' he tupu ki te ono tekau mā waru miriona tauhoko, inā hoki te whakapiki wawenga o ngā tauhoko i tūtohu kētia ki ngā ngāhere, i rēhitatia ki te NZ ETS.

I tūtohia e mātou te Kāwanatanga ko te mea anahe hei whakaheke i tēnei hemihemitanga ko te whakaheke i te rahinga o ngā tauhoko mā roto i ngā hokonga NZ ETS. Ko te whakautu a te Kāwanatanga he whakaheke i te rahinga o ngā hokohoko ka wātea ana ki te hokohoko ki te wāhanga 2025–2029.

Mai anō i tērā kupu akiaki ā matou, kua tere te whakahekenga o te hemihemitanga ki tā mātou i matapae noa, ā, ko te matapaki ināianei he wāhi koni i te rima tekau miriona tauhoko. He nui tonu ngā take e pēnei ana, ā, he iti noa ngā tauhoko i hokona ki te mākete.<sup>iv</sup> Ko te Tūpānga tauhoko utu kore hoki kei te matapae ia ka iti ake i tō ngā matapakinga ō mua.<sup>v</sup> Kua whakahou hoki tētahi panoni tukanga me te whakahoua ā mātou tikanga hei matapaki ake i te hemihemitanga.

Ka mārakerake ake ēnei panonitanga ki ngā kōnukanuka kei *Wāhanga 3: Te herenga utu – Unit Limits.* 

# Ngā tukanga kua panonitia mai i te kupu akiaki 2024

I ngā tau tata nei, kua rongo nei e mātou ngā momo kei te NZ ETS. Kei roto rā o ngā whiunga o te tukunga, inā tōna kumukumu ki te mākete tiketike kei te kaupapa, he tāpiritanga ki ngā aupēhi o te whakapau kaha ki te whakatō ngahere hou. Kua rongo hoki mātou ki ngā nawe o te whiunga kei ngā unuhanga ngahere ki ngā takiwā, me te mea anō ko te NZ ETS kua kore pea e tika tana whakapoapoa i ngā hangarau tukuwaro iti ki te whakahoro me te whakarahi.

Kei te mahere tukuwaro tuarua a te Kāwanatanga he whakaheke i ētahi kumukumu mā te tohua tētahi mahinga ki te whakaheke tukuwaro e māro nei tōna noho ki te NZ ETS me te whakamīreirei i te takohanga a te Kāwanatanga ki te whakarauora te mana me te ihi tonu o te kaupapa.

<sup>&</sup>lt;sup>iv</sup> O ngā tauhoko miriona 14.2 ka wātea ana ki te mākete o 2024, 7.1 miriona kīhai i hoko.

<sup>&</sup>lt;sup>v</sup> Ko te tūpānga tauhoko utu kore he 4.4 tauhoko miriona iti iho i tō te matapae mō te wāhanga 2026–2030. E pēnei ana i nā te ranunga o ngā kapinga kamupene, te hekenga o ngā whakaputanga, me ngā panonitanga ki ngā ture tūpānga tauhoko.

<sup>6</sup> He Pou a Rangi Climate Change Commission | Advice on NZ ETS unit limits and price control settings for 2026–2030

Hei tētahi wāhanga, ka tau tonu ētahi kumukumu ki ngā pānga o tētahi tono panonitanga ki te tukanga NZ ETS e anga ana ki te whakahekenga tarawhiti o ngā pāmu ki te ngahere, me te āhua o tō Aotearoa tutuki i tōna takohanga ā motu 2021–2030 me tōna tahua tukuwaro tuatoru (2031–2035).

Ka wānangahia ngā panonitanga tukanga mai i te wā o tō mātou kupu akiaki 2024, me ngā nawe hangahanga hei whakatika tonu, ki *Wāhanga 2: Te hanga me te haepapa o NZ ETS* ki tēnei kupu akiaki.

# Te horopaki ā-ao

I te tau 2024 te rēkoata weranga rawa, inā hoki te papa ia he weranga mō tōna wā tuatahi i kitea ai te neke atu i te 1.5C, neke atu i ngā reanga o mua. Ko ngā tau 2015–2024 ngā tau tuangahura wera rawa kua rēkoata.<sup>1</sup>

Huri i te ao, ko ngā tukanga utu tukuwaro tonu te whai mana me te aro ki te 24% o ngā rehukino ki te ao (arā a Haina, te uniana o Ūropi me ētahi tino whenua kei Amerika).

Mā te Kawenata Parī, kua herea a Aotearoa ki ngā haepapa, ki ngā tukanga hei aro ki te whakaheke i ōna ake mahinga ki te whakaheke tukuwaro ki te whenua nei. Ko ngā kaitukunga ki tāwāhi me ōna hoa hokohoko kei te hiahia ki ngā inenga hei whakaheke tukuwaro.

# Te uiuinga

Ko tō mātou kupu akiaki he mea uiui ki ngā iwi, ngā kaiuru mākete, me ngā hoatāpui e whai whakaaro ana ki te NZ ETS. Ko ngā kaiuru mākete i kī mai i te ora mai anō te māia, engari i noho whakaraerae tonu ki ngā tohu o te kumikumi o roto i ngā tukanga, i ngā here rānei e pānga ana te kaupapa. Mā roto i ā mātou uiuinga ki ngā rāngai Māori, ka rongo ki te nui hoki o ngā āheinga ōhanga i wāteahia ki ngā ahungahere o roto i te NZ ETS. I rongo hoki mātou he uauatanga ki ngā whakawhiwhinga hua o te kaupapa, nā whai tonu i te ranunga kumikumi me ngā tukanga tukituki, te āhua tukutuku ki te kaupapa, me ngā āhuatanga o te kaipupuru whenua Māori taitara tokomaha. *Wāhanga 2: Te hanga me te haepapa o NZ ETS* he nui ake ngā whakamārama ki ngā tohu nui o ā mātou uiuinga.

# Kupu akiaki ki ngā herenga tauhoko

Ko tō mātou kupu akiaki ki ngā herenga hokohoko he aro ki te whakapūmau i tō NZ ETS ritenga he hāngai ki ngā ahunga whakaheke tukuwaro a te Kāwanatanga. E aro ana ki te nunui o ngā tauhoko hemihemi kei te mākete tonu, ā, e hia hoki ngā tauhoko e matapaetia ana (hei tauira ko te tūpānga tauhoko). Ko te toenga o ngā tauhoko kei raro i taupoki tukuwaro a NZ ETS ka wātea ki te auction.<sup>vi</sup>

Ko te hemihemitanga (i kōrero kētia) kua heke i mua tonu i tōna terenga mai i te kupu akiaki 2024, ā, ko tōna matapae he whakaheke iho hei ngā tau e tū mai nei. Ā nā wai rā, ki te wāhanga 2026–2030 ko te Kāwanatanga he hoko i te tāpiritanga neke atu i te 14 miriona

<sup>&</sup>lt;sup>vi</sup> Ko te 'taupoki tukuwaro' te ahunga whakareanga ki ngā tukuwaro mō ngā ahumahi e noho nei i a NZ ETS. Ka tāmate te taupoki nei ā haere ake nei te wā, hei hokinga mahara ahunga whakaheke tukuwaro. Waihoki te whakaheke ki te kore ā ngā tau 2030.

tauhoko nei i tō ngā mea kua tonoa kētia, rawa mai nei ko te hāngai tonu ki tuarua (tirohia **Whika ES.1**).

E whakahau nei kia kaua e whakarerekē i ngā rahinga hokohoko o 2026 me 2027. Engari ra ko te whakahau ia, mēnā rā ka piki ngā rahinga hokohoko me tuku tae noa ki ngā tau 2028– 2030, me te me hoko anahe ki ngā kauparenga utu e tika ana (he kōrero kei raro iho nei).



Whika ES.1: Te taupoki tukuwaro a NZ ETS, ngā tono hemihemi whakahekenga me ngā rahinga hokohoko 2025–2030

#### Te aromatawai a te Komihana

Kua arotake te āhua panoni ki ngā rahinga tauhoko 2026 me 2027, ā, kāhore e whai mana rānei. Mā te tuku i ngā inenga o tua ka tautoko hoki i te whakahaerenga ka ohorere ana, me te whai pīngoretanga ki te panoni ki ngā rerekētanga o te anamata ki ngā matapae inenga o tua, ngā tukuwaro rānei. Ko ngā rahinga hokohoko ka tae whakapiki ā te anamata mehemea he tino mahinga, engari ko ngā tauhoko ka tuku i te wā nei, tē taea te hoki mai.

E whakahau nei e mātou ko ngā rahinga hokohoko nunui o ngā tau 2028–2030 me whakawaenga mō te toru tau, engari me ū ki ngā whakatau o te whakahaere pīngore. Ko ngā rahinga hokohoko e matapaetia ana ka heke anō mō muri i te 2030.

Tirohia Wāhanga 3: Te herenga utu mō te roanga ake o ngā arotakenga.

# Te kupu ki ngā whakaritenga taura-utu

Ko te utu mākete tauraro (ARP), he reanga kei raro iho i ngā tauhoko tē taea te hoko ki te mākete. Ko te utu here tauraro (CCR) he utu teitei, ā, mēnā tutuki ana ki te mākete, ka tūtohua te tukunga o ngā tauhoko āpiti. Ko ngā kauparenga utu he hirahira ki te hanga me te whakatau tonu i te māia o roto i te NZ ETS, ā, e ū ai te kaupapa i tōna whakahāngai ki ngā ahunga whakaheke tukuwaro a te Kāwanatanga.

Ko tō mātou kupu akiaki, mō te wā nei, ko ngā utu o te ARP me te CCR me noho ki ngā reanga o nāianei, ā, me panoni noa ki te weranga anake. He tino take kia tau te noho i tēnei wā inā hoki te māia o ngā mākete tukuwaro he whakaraerae. Hei te anamata pea whakapiki ake te ARP me te CCR, engari kei te āhua o te whānui o ngā whakahekenga tatau rehukino katoa me whai ki te tutuki i te tuatoru o ngā tahua tukuwaro. Ki ētahi horopaki, ko ngā utu tauhoko me nui kē atu hei tautoko i te whakaurunga rawa e tika ana ki te whakaheke tukunga rehukino. Ka tino titiro mātou ki ngā tūtohu hei roto i ngā tau e tū mai nei, me te whai wāhi rānei ki ngā reanga utu ARP me te CCR e hāngai tonu ai ki te tuatoru o ngā tahua tukuwaro me te takohanga ā-motu tuarua (2031–2035).

Ka taea te kite kāore tonu he take ki te whakaheke i te ARP, i tēnei wā ā haere ake nei. Kua rongo i ngā kaiuru mākete, i roto o 2024, he tohua ake i tō te Kāwanatanga whakaheke i te ARP e whakapaua ana ki te kumi kino me te iti o ngā utu ki ngā tauhoko, ka mutu, te aukati i ngā mākete NZ ETS. Ko ngā tohu hou ki te whakahekenga rā pea ki te ARP te tūpono rā ka pākarukaru ake te māiatanga ki te mākete. Mā te whakaheke i te ARP ka tāmi ngā utunga rawa ki te whakaheke tukuwaro, ā, he whakahere i ngā toa ki ngā ahunga āhuarangi o te Kāwanatanga ki te raru.

Tirohia Wāhanga 4: Te ritenga taura-utu ki te roanga ake o tō tātou aromatawai.

# Te whakahāngai i ngā ritenga ki ngā ahunga whakaheke tukuwaro

Ko Te Ture Urupare ki te Āhuarangi 2002 me aro ki te herenga hokohoko me ngā ritenga taura-utu kua whakahaungia e ngā tahua tukuwaro, ngā takohanga ā-motu (NDCs), me te ahunga 2025. Ki tēnei aronga, ko o mātou whakahau he tākai maha. Ko o mātou whakahau mā te herenga hokohoko he tau tonu ki te ritenga taura-utu e whakamahingia ana. Ko ngā panonitanga ki te ritenga taura-utu ka whai tūraru ki ngā ritenga herenga hokohoko, ā e rua, e rua. E tukutukungia ana ngā ritenga me te hiahia kia ngātahi te aronga ki a rāua anō.

Ko ō mātou whakahau he whai i te ritenga ki te ahunga 2050, te tuarua me te tuatoru o ngā tahua tukuwaro, me te tuatahi me te tuarua o ngā takohanga ā-motu.

Ko ngā matapae a te Kāwanatanga he whakaatu i te tutuki o te NDC tuatahi ki te whiwhi i te takohanga 84–89 MtCO<sub>2</sub>e mai i ngā tikahanga o whenua kē. Kua whakatauria te Kāwanatanga tōna kuhunga ki whakaaro matua kia whakaheke i ngā tukuwaro o te whenua nei, rawa atu ko te kuhunga ki te whiwhi i ngā tikahanga o tāwahi hei whakapiri tonu mai i ngā tahua tukuwaro ki tō mātou NDC tuatahi. Ko o mātou whakahau ki tēnei kupu akiaki he hukihuki, engari mā te Kāwanatanga tonu te tikanga mena ka ū.

*Tūhanga 3: Te aromatawai i te kawenata,* he kupu tūmatanui ki tō mātou pae tukutuku, kei reira te roanga ake o o mātou mahi kawenata ki ngā tahua tukuwaro, ngā takohanga ā-motu me te ahunga 2050.

# Ka ahatia ngā whakaritenga o NZ ETS?

Ko tēnei kupu akiaki he whatanuku tata anō ki te ara whānui hei whakahou noa i ngā whakaritenga NZ ETS.

Ka wānangai te Kāwanatanga tō mātou kupu akiaki me te whai uiuinga ki ngā tono, me tō mātou e mōhio nei, ka ārahina te Manatu Taiao te kaupapa mā te Minita Hurirangi tonu ki te koata tuarua o 2025. Me whai te Kāwanatanga ki te whakatau ngā herenga hokohoko me ngā ritenga taura-utu mō NZ ETS mō mua tonu i ngā ture ka whakahoungia ā te 30 o Hepetema 2025. Ka tau ngā whakaritenga hou ā te 1 o Hanuere 2026. E matapaetia ana ka hoatu i te kupu akiaki hou ki tēnei take, mō te wāhanga 2027–2031, ki te koata tuatahi o 2026.

# Ngā whakahau me ngā tono rahinga hokohoko

# Ngā tono rahinga tauhoko

		re he itanga	Ngā wh	Ngā mea hou	
Tauhoko miriona	2026	2027	2028 2029		2030
NZU rahinga mākete (atu i ngā rahinga utu here tauraro)	5.2	4.3	7.0	7.0	7.0

# Te whakahau herenga hokohoko me te ritenga hokohoko

		Kāhore he Ngā whakahau panonitanga			Ngā mea hou
Tauhoko miriona	2026	2027	2028	2028 2029	
Te tauoti ki ngā Tauhokohoko o Aotearoa ka wātea mā te hokohoko (te rahinga CCR hoki)	11.7	10.2	12.3	11.7	10.9
Te tauoti ki ngā tauhokohoko o tāwāhi kua whakaaetia ki te whakamahi	0.0	0.0	0.0	0.0	0.0
Te tauoti kau o ngā tauhokohoko	17.4	15.9	16.9	16.2	14.9

		ore he nitanga	Ngā wh	Ngā whakahau				
Te utu here tauraro	2026	2027	2028 2029		2030			
Taunga 1								
Te tūtohu utu	\$203	\$213	\$223	\$235	\$246			
Te rahinga tāpui (tauhoko miriona)	2.3	2.1	1.9	1.7	1.4			
	Taun	ga 2						
Te tūtohu utu	\$254	\$267	\$279	\$293	\$308			
Te rahinga tāpui (tauhoko miriona)	4.2	3.8	3.4	3.0	2.5			

		ore he nitanga	Ngā wha	Ngā mea hou	
Te utu mākete tauraro	2026	2027	2028 2029		2030
Te utu mākete tauraro	\$71	\$75	\$78	\$82	\$86

# **Executive summary**

This is our annual advice to the Government on unit limits and price control settings for the New Zealand Emissions Trading Scheme.

The New Zealand Emissions Trading Scheme (NZ ETS) is the Government's key policy tool for reducing domestic greenhouse gas emissions.

He Pou a Rangi Climate Change Commission provides annual advice on the scheme's unit limits and price control settings (NZ ETS settings), and on any adjustments needed to support emissions reduction targets.<sup>vii</sup>

This is the fourth year the Commission has provided advice on NZ ETS settings. This advice covers the settings for 2026–2030.

# The NZ ETS's contribution to emissions reduction targets

The NZ ETS is a market mechanism created to incentivise reductions in greenhouse gas emissions. The scheme applies to emissions from every sector of Aotearoa New Zealand's economy except for agriculture.<sup>viii</sup> The scheme covers about half of the country's emissions.

By limiting the volume of allowed emissions the scheme imposes a cost on emissions, which creates financial incentives for businesses, investors, landowners and consumers to pursue lower emissions options.

Under the scheme, market participants acquire units (known as 'New Zealand Units'), with each unit allowing them to emit one tonne of CO<sub>2</sub>e. The Government supplies units into the market in several ways. It makes a limited number of units available through auctions. It allocates units for activities (in particular forestry) that remove and store carbon. It also allocates units to some industries ('industrial free allocation').

Once emissions units are in the market, participants can buy and sell among themselves. In this way, the Government determines the volume of units available to market participants, but the market determines the emissions price and how emissions will be reduced.

Auction volumes and price controls are designed to ensure that NZ ETS settings align with emissions budgets, the 2050 target, and nationally determined contributions under the Paris Agreement.<sup>ix</sup>

<sup>&</sup>lt;sup>vii</sup> 'Emissions reduction targets' in this advice refers to emissions budgets, the 2050 target, and nationally determined contributions under the Paris Agreement.

<sup>&</sup>lt;sup>viii</sup> The NZ ETS does not include biological emissions from agriculture. Energy and transport emissions from agricultural activities remain within the scheme.

<sup>&</sup>lt;sup>ix</sup> In 2024 the Commission recommended amendments to the 2050 target. This NZ ETS settings advice relates to the current 2050 target as set out in the Climate Change Response Act 2002.

### **Key points for decision-makers**

### Context for our advice

- Since our 2024 advice the number of surplus units in the market has reduced more quickly than previously forecast.
- The second emissions reduction plan emphasised the Government's commitment to a credible NZ ETS as the main tool for reducing domestic emissions.
- Market confidence in the NZ ETS has improved but remains fragile. This advice aims to support a credible, predictable and stable market.
- Some areas of uncertainty remain, particularly about how the country will meet emissions reduction targets for 2031–2035.
- Our advice is aimed at ensuring that unit limits and price control settings, taken as a package, align with the Government's emissions reduction targets.

### Advice on unit limits

- The earlier reduction in surplus means more units can be made available for auction than previously forecast, while remaining aligned with emissions reduction targets.
- We recommend that there be no change to 2026 and 2027 auction volumes. In our assessment, changes to the 2026 and 2027 settings are not justified.
- Additional volumes could be offered in the years 2028–2030, subject to adequate price guardrails. Deferring the additional volumes until then would provide flexibility to adjust to any future changes in the forecast surplus or in emissions.

### Advice on price controls

- We recommend that the auction reserve price (ARP) and the cost containment reserve (CCR) price triggers remain at current levels, adjusted only for inflation.
- The current settings are consistent with the Government's emissions reduction targets, based on the evidence available now. Stability is critical while confidence in the NZ ETS remains fragile.
- We see no case for reducing the ARP, either now or in future. Lowering the ARP would undermine existing investments and those needed to meet the second emissions budget.
- It is possible that price control settings will need to increase in the future, depending on the mix of actions taken to reduce emissions in coming years. We will continue to monitor and analyse the currently highly uncertain evidence about what might be needed to meet the third emissions budget, in our annual advice.

# **Context for this advice**

Since our 2024 advice there have been changes in Government policy and market conditions affecting the operation of the NZ ETS.

# Reduction in NZ ETS surplus units since our 2024 advice

For the NZ ETS to effectively support reductions in greenhouse gas emissions, the number of units available for use in the scheme needs to decline in line with emissions budgets.

In 2024 we advised that the number of units available in the market had grown significantly in the preceding year, creating risks to the achievement of emissions budgets. Between mid-2022 and September 2023 that 'surplus' had grown to 68 million units, mainly due to a large increase in units allocated for forests registered in the NZ ETS.

We advised the Government that the only means of reducing this surplus was to reduce the volume of units available through NZ ETS auctions. The Government responded by reducing the volume of units available for auction over the period 2025–2029.

Since we provided that advice, the surplus has reduced more quickly than anticipated and is now estimated to be just over 50 million units. There are several reasons for this. Fewer units were sold at auction than previously forecast.<sup>x</sup> Industrial free allocation is also expected to be lower than previously forecast.<sup>xi</sup> We have also revised a technical adjustment and made refinements to our methodology for estimating the surplus.

We explain these changes in more detail in *Part 3: Te herenga utu – Unit limits*.

# Policy changes since our 2024 advice

In recent years, we have heard enduring themes around the NZ ETS. This includes the effects of policy uncertainty on market confidence in the scheme, adding to barriers to investing in planting new forests. We have also heard concerns around the impacts of afforestation on rural communities, and that the NZ ETS may not be effective at incentivising the uptake of low emissions technologies at pace and scale.

The Government's second emissions reduction plan has reduced some uncertainty by signalling an approach to emissions reductions that is strongly centred on the NZ ETS and emphasising the Government's commitment to restoring the credibility of, and confidence in, the scheme.

At this stage, some uncertainty remains around the impacts of a proposed change to NZ ETS policy aimed at reducing conversion of farmland to forest, and about how the country will meet its 2021–2030 nationally determined contribution and its third (2031–2035) emissions budget.

<sup>&</sup>lt;sup>x</sup> Of 14.2 million units available at auction during 2024, 7.1 million did not sell.

<sup>&</sup>lt;sup>xi</sup> Industrial free allocation was 4.4 million units less than forecast for the period 2026–2030. This is due to a combination of plant closures, reduced production, and changes to the industrial free allocation regulations.

We discuss policy changes since our 2024 advice, and some structural issues still to be resolved, in *Part 2: Te hanga me te haepapa o NZ ETS – Current state and role of the NZ ETS* of this advice.

## The international context

The year 2024 was the hottest on record, with the global mean surface temperature for the first time exceeding  $1.5^{\circ}$ C above pre-industrial levels. The years 2015–2024 are the ten warmest years on record.<sup>1</sup>

Globally, emissions pricing policies continue to be important and now cover 24% of the world's greenhouse gas emissions (including China, the European Union and several of the largest states in the United States).

Through the Paris Agreement, Aotearoa New Zealand has legal obligations to pursue domestic efforts to reduce emissions. Export customers and trading partners increasingly expect to see robust measures in place to reduce emissions.

# Engagement

Our advice is informed by engagement with a selection of iwi/Māori, market participants and stakeholders interested in the NZ ETS. Market participants told us that confidence was recovering, but remained vulnerable to any signs of uncertainty in policies or conditions affecting the scheme. Through our engagement with iwi/Māori groups, we heard that significant economic opportunities are available through forestry in the NZ ETS. We also heard that there were challenges to benefiting from the scheme, due to a combination of uncertain and conflicting policies, the scheme's complexity, and the characteristics of collectively owned Māori land. *Part 2: Te hanga me te haepapa o NZ ETS – Current state and role of the NZ ETS* provides more detail on key themes from our engagement.

# **Advice on unit limits**

Our advice on unit limits is aimed at ensuring that NZ ETS settings align with the Government's emissions reduction targets. We consider how many surplus units are already in the market, and how many units are forecast to enter (for example through industrial free allocation). Remaining units under the NZ ETS emissions cap can be made available at auction.<sup>xii</sup>

The surplus (mentioned earlier) has declined ahead of schedule since our 2024 advice and is forecast to reduce further in coming years. As a result, during the period 2026–2030 the Government could auction 14 million more units than previously proposed, while staying aligned with the second emissions budget (see **Figure ES.1**).

<sup>&</sup>lt;sup>xii</sup> The 'emissions cap' is a targeted level of emissions for sectors covered by the NZ ETS. The cap declines over time to reflect emissions reduction targets. It is likely to reduce to zero in the 2030s.

We recommend that there be no change to 2026 and 2027 auction volumes. Instead, we recommend that any increase in auction volumes be deferred until the years 2028–2030, and then offered only with adequate price guardrails (discussed below).





#### Source: Commission analysis

We have assessed that making changes to the 2026 and 2027 unit volumes is not justified or desirable. Deferring any increase would also support adaptive management, providing flexibility to adjust to any future changes in the forecast surplus or emissions. Auction volumes can be increased later if necessary, whereas units sold now cannot be recovered.

We recommend that the increased auction volumes during 2028–2030 be averaged over the three years, also for reasons of adaptive management. Auction volumes are expected to reduce again after 2030.

See Part 3: Te herenga utu – Unit limits for our full analysis.

# Advice on price control settings

The auction reserve price (ARP) is a floor below which units cannot be sold at auction. The cost containment reserve (CCR) is a price ceiling which, if reached at auction, triggers the release of additional units. These price guardrails are important for creating and maintaining confidence in the NZ ETS and for ensuring that the scheme aligns with the Government's emissions reduction targets.

Our advice is that, for now, the ARP and CCR prices should remain at current levels, adjusted only for inflation. Stability is also critical at a time when confidence in the emissions market remains fragile. It may be necessary in future years to raise the ARP and CCR, depending on the scale of gross emissions reductions needed to meet the third emissions budget. In some scenarios, unit prices may need to be significantly higher to support the necessary investment in reducing gross emissions. We will closely monitor relevant indicators in coming years, to consider whether the ARP and CCR price levels continue to align with the third emissions budget and the second nationally determined contribution (2031–2035).

We can see no case for reducing the ARP, either now or in the future. We have heard from market participants that, during 2024, signals that the Government might lower the ARP contributed to volatile and low unit prices, and to declined NZ ETS auctions. Any new signal that the ARP might be lowered would be likely to further damage market confidence. Lowering the ARP would undermine investments in emissions reductions, and put achievement of the Government's climate targets at risk.

See Part 4: Te ritenga taura-utu – Price control settings for our full analysis.

# Alignment of the recommended settings with emissions reduction targets

The Climate Change Response Act 2002 requires that the recommended unit limits and price control settings accord with emissions budgets, nationally determined contributions (NDCs), and the 2050 target. In this respect our recommendations are presented as a package. Our unit limit recommendations are contingent on the current price control settings also being maintained. Changes to the price control settings could have implications for unit limit settings, and vice versa. The settings are inter-related and need to be considered together.

Our recommended settings accord with the 2050 target, the second and third emissions budgets, and the first and second NDCs. Government forecasts show that meeting the first NDC will require an 84–89 MtCO<sub>2</sub>e contribution from offshore mitigation. The Government has stated its intention to prioritise domestic emissions reductions, but also to acquire the offshore mitigation needed to bridge the gap between emissions budgets and the first NDC. Our recommendations in this advice are conditional on the Government doing that.

*Technical Annex 3: Assessment of accordance,* published separately on our website, provides more information about how our advice accords with emissions budgets, nationally determined contributions and the 2050 target.

# What happens next for NZ ETS settings?

This advice is one step within a wider process for updating the NZ ETS settings.

The Government will consider our advice and run a public consultation on proposals, which we understand will be led by the Ministry for the Environment on behalf of the Minister of Climate Change in the second quarter of 2025. The Government must make decisions on NZ ETS unit limits and price control settings in time for the regulations to be updated by 30 September 2025. The new settings will come into force on 1 January 2026.

We expect to provide our next advice on this topic, relating to the period 2027–2031, in the first quarter of 2026.

# **Recommendations and proposed auction volumes**

# **Proposed auction volumes**

	No ch	anges	Upd	New	
Million units	2026	2027	2028	2029	2030
NZU auction volumes (excluding cost containment reserve volumes)	5.2	4.3	7.0	7.0	7.0

# **Recommended unit limits and price control settings**

	No ch	anges	Upd	New		
Million units	2026	2027	2027 2028 2029		2030	
Limit on New Zealand Units available by auction ( <i>including CCR volume</i> )	11.7	10.2	12.3	11.7	10.9	
Limit on the approved overseas units used	0.0	0.0	0.0	0.0	0.0	
Overall limit on units	17.4	15.9	16.9 16.2		14.9	

	No ch	anges	Upd	New		
Cost containment reserve	2026 2027		2028	2029	2030	
Tier 1						
Trigger price	\$203	\$213	\$223	\$235	\$246	
Reserve volume (million units)	2.3 2.1		1.9	1.7	1.4	
	Tie	r 2				
Trigger price	\$254	\$267	\$279	\$293	\$308	
Reserve volume (million units)	4.2	3.8	3.4	3.0	2.5	

	No cha	anges	Upda	New	
Auction reserve price	2026 2027		2028	2030	
Auction reserve price	\$71	\$75	\$78	\$82	\$86

# **PART 1: Te taupuaki – Introduction**

This is He Pou a Rangi Climate Change Commission's fourth annual advice about unit limits and price control settings for the New Zealand Emissions Trading Scheme.

Under the Climate Change Response Act 2002 (the Act), the Commission is required to provide the Government with annual advice about unit limits and price control settings for the New Zealand Emissions Trading Scheme (NZ ETS). This advice supports the Minister of Climate Change to update NZ ETS settings in regulations.

This is the fourth time the Commission has provided this advice. This report covers the settings for 2026–2030.

# About the New Zealand Emissions Trading Scheme

The NZ ETS is the Government's key policy tool for reducing greenhouse gas emissions. It applies to emissions from every sector of the economy except for agricultural activities. NZ ETS participants obtain units (called 'New Zealand Units' (NZUs)) allowing them to emit greenhouse gases. Each unit allows a participant to emit one tonne of CO<sub>2</sub>e.

Participants can acquire NZUs by:

- buying them from the Government at auction
- buying them from other NZ ETS participants
- receiving them from the Government for free (if they undertake an eligible activity that is both emissions-intensive and trade-exposed)
- earning them from the Government for activities such as forestry that remove carbon from the atmosphere.

The scheme creates financial incentives to reduce emissions while leaving market participants to decide how that should happen. The scheme's broad coverage means it affects a much wider range of emissions than is possible with more specific policies.

The NZ ETS covers about half of the country's greenhouse gas emissions.

# NZ ETS unit limits and price control settings

The Government sets limits, the main function of which is to determine the number of units that can be auctioned into the NZ ETS each year. These 'unit limits' aim to keep the supply of units to the market consistent with Aotearoa New Zealand's emissions budgets.<sup>xiii</sup>

The Government also sets price controls that apply at NZ ETS auctions. An auction reserve price (ARP) ensures that units are not auctioned at prices that are too low to support the

<sup>&</sup>lt;sup>xiii</sup> Other than units allocated for removal activities (most significantly, forestry units), which are not incorporated into or restricted by the NZ ETS unit limits.

<sup>18</sup> He Pou a Rangi Climate Change Commission | Advice on NZ ETS unit limits and price control settings for 2026–2030

investments necessary to reduce emissions in line with emissions budgets. The cost containment reserve (CCR) releases additional units when auction prices rise to a specified trigger price or prices.

The price controls apply only to auctions. Once units are in the market, participants can buy and sell at any price. In this way, the emissions price in the NZ ETS is ultimately determined by the market.

The unit limit and price control settings are set in regulations for five years into the future. The Minister of Climate Change updates the regulations annually.

See Part 3: Te herenga utu – Unit limits and Part 4: Te ritenga taura-utu – Price control settings for a more detailed description of the design and operation of these unit limits and price controls.

# About this advice

Under the Act, the Minister of Climate Change is required to update unit limits and price control settings annually. Our advice supports the Minister to make decisions about those settings.

# Matters that must be considered

Section 30GC of the Act sets out matters that must be considered when NZ ETS auction regulations are updated. These include (among other things) anticipated emissions volumes, the proper functioning of the NZ ETS, international climate change obligations, available ways of reducing greenhouse gas emissions, international emissions prices, impacts of emissions prices on households and the economy, and inflation.

Section 5M of the Act sets out a range of matters we must consider (where relevant) in all of our advice. Those matters include, among other things, available scientific knowledge, likely economic effects, social and environmental circumstances, the Crown–Māori relationship and effects on iwi/Māori.

All our advice is required to be consistent with the Act's purposes. One of those is to set a clear and stable framework for Aotearoa New Zealand to contribute to global efforts to limit average warming to 1.5°C above pre-industrial levels. Other purposes include enabling the country to meet its international obligations, and providing for the operation of an emissions trading scheme that supports global efforts to reduce emissions and that assists the country to meet emissions budgets and the 2050 target.

Appendix A: Summary of how legislative requirements and considerations under the Act have been addressed sets out these matters from sections 30GC and 5M, and notes how we have addressed them in this advice.

# Alignment with emissions reduction targets

Section 30GC of the Act requires that unit limits and price control settings are in accordance with emissions budgets, the 2050 target, and nationally determined contributions (NDCs)

under the Paris Agreement. In this advice, we refer to the emissions budgets, the 2050 target and NDCs collectively as Aotearoa New Zealand's 'emissions reduction targets'.

*Technical Annex 3: Assessment of accordance,* published separately on our website, explains how we have addressed those requirements.

# A five-year rolling timeframe

Under the Act, unit limits and price control settings are set for five years in advance and are updated annually. This approach gives market participants clarity and confidence about future settings, while also allowing flexibility to adjust settings as circumstances change. As shown in **Figure 1.1**:

- settings for the current year are fixed and cannot be changed
- settings for the next two years can be changed only under certain conditions
- the Minister can amend settings for years 3 and 4, and must add new unit limits and price controls for year 5.

Settings for years 1 and 2 can be amended only if the price controls have been triggered in the current year, or if amendment is justified by special circumstances including:

- a change to the relevant emissions budget or NDC
- a change that has significantly affected any matter that the Minister was required to consider when recommending the settings
- a *force majeure* event.

*Part 3: Te herenga utu – Unit limits* and *Part 4: Te ritenga taura-utu – Price control settings* explain how we have addressed these requirements.



Figure 1.1: The five-year rolling process for unit limits and price control settings

Source: Climate Change Commission

## Engagement

Effective engagement is an important part of our process for developing advice.

To support the development of this advice we engaged with certain mandated iwi/Māori representatives including representatives from collective owners of Māori land. We also engaged with companies from different sectors participating in the NZ ETS, industry associations, market intermediaries including trading houses, and individual experts and consultants specialising in the NZ ETS. This enabled us to hear insights, test ideas and enhance our understanding of the NZ ETS market and of market participants' and other stakeholders' concerns.

Key themes arising from our engagement are summarised in *Part 2: Te hanga me te haepapa* o NZ ETS – Current state and role of the NZ ETS.

## Iwi/Māori considerations

All of our advice to the Government reflects consideration of the Crown–Māori relationship, te ao Māori, and specific effects on iwi/Māori, as required by the Act. Engagement with iwi/Māori is a key mechanism that helps identify issues relevant to our NZ ETS advice. Matters considered in this year's advice include the approaches taken by iwi/Māori entities to their decision-making about managing their units in the NZ ETS, as well as the impacts of emissions prices on iwi/Māori. Engagement feedback also provides important context about how the interaction of iwi/Māori with the NZ ETS is affected by the specific characteristics and historical circumstances of land owned by Māori.

*Part 2: Te hanga me te haepapa o NZ ETS – Current state and role of the NZ ETS* provides a summary of feedback from iwi/Māori, and matters where specific effects on iwi/Māori are considered are discussed in *Part 3: Te herenga utu – Unit limits* (specifically, pre-1990 forestry units) and *Part 4: Te ritenga taura-utu – Price control settings*.

## How this advice fits with the Commission's wider work

This advice is specifically focused on technical recommendations about the NZ ETS unit limits and price control settings. As required under the Act, the Commission provides separate advice about the 2050 target, emissions budgets, emissions reduction plans, and climate change adaptation risks and policies. While this advice is limited to NZ ETS settings, the broader climate policy landscape remains important context for this advice. We summarise those contextual issues in *Part 2: Te hanga me te haepapa o NZ ETS – Current state and role of the NZ ETS*. For our other advice to the Government see our website, www.climatecommission.govt.nz.

## Timeframe for consultation and new regulations

Providing this advice is one step within a wider process for updating the NZ ETS regulations. The Government will consider our advice and seek public input on proposed changes. We understand this consultation will be led by the Ministry for the Environment on behalf of the Minister of Climate Change in the second quarter of 2025.

The Government must make decisions on NZ ETS unit limits and price control settings in time for the regulations to be updated by 30 September 2025. The new settings will come into force on 1 January 2026. We expect to provide our next advice on this topic, relating to 2027–2031, in the first quarter of 2026.

# PART 2: Te hanga me te haepapa o NZ ETS – Current state and role of the NZ ETS

This section discusses the state of the market and other context for our advice on NZ ETS unit limits and price control settings.

# The wider context for this advice

He Pou a Rangi Climate Change Commission's recommendations in this report are limited to the NZ ETS unit limits and price control for 2026–2030, prescribed by the Act. These settings are a key part of ensuring the NZ ETS is credible and effective, but other aspects of the scheme also matter and can affect how these settings must be managed. The policy and economic landscape within which the NZ ETS sits also shapes how it functions.

This part of our advice highlights key issues relating to this wider context. It discusses market and policy developments; feedback from engagement with market participants, including representatives of iwi/Māori entities; as well as challenges to the effective functioning of the NZ ETS.

# **International developments**

Globally, carbon pricing mechanisms have continued to expand as effective tools for reducing emissions. Approximately 24% of global greenhouse gas emissions are now subject to carbon pricing, encompassing both emissions trading schemes and carbon taxes.<sup>2</sup>

In January 2025, the United States announced its withdrawal from the Paris Agreement. However, the United States' previous withdrawal from the Paris Agreement, announced in 2017, did not deter international action on climate change. Instead, it galvanised other nations to reaffirm and intensify efforts to reducing greenhouse gas emissions.

The European Union's Emissions Trading System (EU ETS) remains a cornerstone of its climate policy. The European Union has also introduced a Carbon Border Adjustment Mechanism (CBAM) which will tax imported goods from countries with weaker climate regulations, pushing trading partners to adopt stricter emissions policies.

China has implemented the world's largest carbon market by emissions coverage, including more than 4.5 billion tonnes of emissions from the electricity sector. China is also a clean energy powerhouse, accounting for more than 40% of global installed capacity for wind and solar PV, and more than half of the electric cars in the world today.<sup>3</sup>

Closer to home, in 2023 Australia strengthened its carbon pricing scheme, the Safeguard Mechanism, with a further policy review planned for 2026–27.<sup>4</sup>

Even within the United States, state-level initiatives are progressing climate action. Multiple states are implementing carbon markets.<sup>xiv,5</sup> Most significantly this includes California, which would be the fifth-largest economy in the world if it were a country. Its cap-and-trade scheme has been operating since 2013.

The private sector is also increasingly influential. Investors are demanding stronger environmental, social and governance (ESG) commitments from businesses, while major corporations are increasingly demanding climate action across their supply chains. Nestlé, for example, has committed to achieving net-zero emissions by 2050 and is requiring its suppliers, including those in Aotearoa New Zealand, to adopt more sustainable agricultural practices.

This highlights that climate action is not dependent on the leadership of any single country. For Aotearoa New Zealand, continuing efforts to cut emissions will help protect the country's environment and future-proof economic resilience, competitiveness and trading relationships.

# **Recent NZ ETS market and policy developments**

Since the Commission's last NZ ETS advice in early 2024, the NZ ETS market once again experienced a period of notable volatility, although the final months of the year saw a return to more stable prices.

**Figure 2.1** shows the evolution of the NZU secondary market spot price over 2023–2024.<sup>6</sup> A period of relative stability in late 2023 and early 2024, in which the price hovered around \$70, ended when the first auction of 2024 only partially cleared at the then-\$64 floor price.

A further price drop was seen when the Government's NZ ETS settings consultation was released in May 2024. Feedback from our engagement with market participants indicates that this price drop was precipitated by the suggestion, in the consultation document, that the Government was considering lowering the auction reserve price. Market participants perceived that there was not adequate explanation of why this was being considered.

Two declined auctions followed, with the price only recovering after the Government announced its decision on the NZ ETS settings for 2025–2029, which aligned with the Commission's advice. The price then stabilised around \$60–64, with a partial clearance at the final auction of the year in December.

<sup>&</sup>lt;sup>xiv</sup> For example, Washington State, Oregon and Colorado have existing state-level carbon pricing initiatives, with New York State set to launch a new ETS in 2025. Eleven northeast states (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont) also work together in the Regional Greenhouse Gas Initiative to cap and reduce CO<sub>2</sub> emissions from the electricity sector. See International Carbon Action Partnership (2025) for more information.





Source: Theecanmole (2025)<sup>7</sup>

The year 2024 was also eventful for NZ ETS policy developments.

The Government concluded a process to update industrial free allocation settings. The resulting changes to regulations are expected to contribute to lower overall allocations being given out in future. This has impacts for the NZ ETS unit limit settings, as discussed in *Part 3: Te herenga utu – Unit limits*.

In December 2024, the Government published the second emissions reduction plan, for meeting the second (2026–2030) emissions budget. The plan signalled a shift from the previous Government's approach to reducing emissions. The revised approach is strongly centred on the NZ ETS. The plan emphasised the Government's commitment to restoring the credibility of, and confidence in, the scheme. It also emphasised that providing regulatory predictability is a priority.

The plan also signalled different approaches to forestry. It outlined the Government's intention to restrict the type of land that can enter into the NZ ETS for newly planted exotic forestry, using limits based on land-use capability (LUC) – a measure of land quality. The purpose of this is to prevent whole farm conversions to forest, and to protect productive agricultural land. The plan also highlighted the Government's intention to explore partnerships with the private sector to plant trees on Crown-owned land. The details of these intended policies are still being developed.

Other forestry-related developments included the Government reducing, by 50%, a previously proposed annual per-hectare charge on post-1989 forest land in the NZ ETS. A further review of cost recovery settings is scheduled to take place in 2026.<sup>8</sup> Te Uru Rākau continued research on updating the default carbon tables, which are used by many NZ ETS participants to work out the volume of carbon stored by their forests. Consultation on proposed changes to the tables is likely to occur later in 2025.<sup>9</sup>

Finally, on 30 January 2025, the Government announced Aotearoa New Zealand's second nationally determined contribution (NDC) under the Paris Agreement. This new target is to reduce emissions by 51% to 55% compared to 2005 levels, by 2035.<sup>10</sup> This target aligns closely to the third emissions budget, the domestic emissions reduction target that applies to 2030–2035.

# Key themes from engagement

Each year we engage with a range of organisations and people participating in, or otherwise involved in, the NZ ETS, to help inform our advice. These discussions are invaluable, as they allow us to test assumptions and other aspects of our analysis, and to update our understanding of the market.

Below we set out the key themes that emerged from these discussions, which were held in late 2024 and early 2025. They provide important context for our advice and for how the scheme is operating.

## Market confidence has improved

We heard from almost everyone we engaged with that, by late 2024, the market was in a much better place than it had been in earlier in the year. The price had stabilised, and activity was calm, with normal purchasing behaviour by emitters returning.

There was no shortage of liquidity, on both the buy and sell sides of the market. Although government auctions in 2024 had only partially cleared, forestry participants were selling significant volumes into the market. Other positive developments included the launch of NZU futures contracts and an increase in the number of trading platforms.

## But concerns about unpredictable management of the NZ ETS remain

A strong theme was that market confidence was easily damaged, but slow to build back up. Market participants generally appreciated the Government's focus on improving the stability and predictability of the NZ ETS. However, participants also emphasised that continued efforts were needed. We heard that the volatility and uncertainty of the past two years had made many wary of the risk of ad hoc interventions, or further unexpected proposals for policy change. Market participants told us that they consequently found it difficult to take a long-term view on the NZU price, and that this was affecting the efficiency of the market.

Some businesses stressed that changes to the first two years of the NZ ETS settings regulations would disrupt commercial arrangements. They emphasised that both the Commission and the Government should prioritise stability for those first two years.

Representatives of organisations involved in forestry shared that high uncertainty was still hindering investment. The full details of the restrictions by LUC on registering land into the NZ ETS were still to be clarified. Beyond the NZ ETS, various other central and local government policies pulled in different directions, increasing the risks associated with investing in afforestation.

Businesses said they understood that the NZ ETS would change over time, but they needed information so they could understand the rationale for potential changes. The 2024 NZ ETS settings consultation document had mentioned lowering the auction reserve price. This negatively affected the market, partly because it was not accompanied by reasoning or analysis as to why the Government might make this change. A perceived lack of transparency on the Government's thinking with respect to the auction reserve price remained a concern.

## Iwi/Māori perspectives

Our engagement with representatives of iwi/Māori entities highlighted the diversity of views and aspirations across these groups, as well as the challenges they experience in interacting with the NZ ETS due to the specific characteristics and historical circumstances of land owned by Māori.

Those who we engaged with emphasised that forestry in the NZ ETS offers important opportunities for iwi/Māori to lift their prosperity. There was a desire for the Government to

clearly articulate a well-thought-out plan for the role of forests in the low emissions transition, as this would help iwi/Māori landowners navigate decisions about forestry activities. Some were concerned that there was inadequate recognition of all the value forestry contributes – to exports, employment, the climate, as well as wider environmental benefits such as to biodiversity, water quality and erosion control. They also expressed concern that policies change frequently from Government to Government.

We heard that, for some owners of Māori land, the NZ ETS is the only opportunity available for an economic return, in areas where production forestry may be uneconomic or inappropriate for safety or environmental reasons. For others, NZ ETS income was important to help fund diversification away from forestry, a sector to which they are heavily exposed.

However, collective ownership structures, together with the nature of the NZ ETS itself, make it difficult for iwi/Māori to actively participate and access these returns. There are barriers at every step. The administrative processes to register land into the NZ ETS are particularly challenging for collectively owned land, and the scheme itself is complex. We have heard that due to land ownership structures and historical decisions, it is more difficult for many Māori landowners to access capital and resources necessary to obtain technical advice, develop expertise, or invest in land preparation and planting. Decisions about managing NZUs could be time-consuming and need to take into account a range of non-financial and intergenerational considerations. We heard that support for more education about afforestation and the NZ ETS would be welcome and would better enable Māori to benefit from the opportunities presented by the scheme.

Consistent with previous engagement, we also heard frustration at the perceived unfairness of aspects of the NZ ETS. Examples included the low NZ ETS returns for native forests as compared to exotic species, as well as the imposition of liabilities on pre-1990 forest land with only limited compensation for the restrictions on the ability to change land use.

Iwi/Māori entities also expressed similar concerns to those voiced by other organisations involved in forestry – that central and local government regulations and policies on forestry are difficult to navigate and often conflicting.

# Challenges for the operation of the NZ ETS

There are uncertainties in the design of the NZ ETS that, if they remain unresolved, will make it difficult for the Commission to develop NZ ETS settings recommendations that are compatible with how the scheme operates.

# Achieving the first NDC

There is uncertainty about how the Government plans to meet the first nationally determined contribution (NDC) and this includes some details around the role of the NZ ETS.

## Managing the emissions cap to support meeting the NDC

The Government has set out a strategy for achieving the first NDC that includes prioritizing domestic action.<sup>11</sup> There is some scope for Government to enhance domestic action to meet

more of the NDC domestically.<sup>xv</sup> For example, when there are step changes in emissions that are not already accounted for in the relevant emissions budget. Step changes could happen due to changes in certain industries, such as the closure of a production facility, or its transformation to a lower emissions production process.

Where these opportunities arise, the Government could tighten the emissions cap for the NZ ETS to help lock in the emissions reductions that have occurred.

The first NDC is set at a level that requires deeper emissions reductions than are expected to be made domestically through emissions budgets. The difference between domestic action and the first NDC can be made up for by acquiring offshore mitigation.

The more reductions that are made domestically, the less offshore mitigation would be needed. However, meeting the first NDC with domestic action only would require a scale and pace of economic, social and technological change over the next five years that would be highly disruptive.<sup>xvi</sup>

The Government's approach to acquiring the necessary offshore mitigation is currently unclear, as is the NZ ETS's role in supporting the offshore component of the first NDC. This is discussed further in *Part 3: Te herenga utu – Unit limits*, under step 1.

The second emissions reduction plan set out a provisional decision by the Government to adopt an NZ ETS emissions cap for the 2026–2030 period based on its most recent emissions projections. However, it is unclear how the Government intends to manage the cap as these projections change over time. In this year's advice we have based our settings on the provisional emissions cap in the second emissions reduction plan.

If the Government wishes to make the most of emissions reductions in NZ ETS sectors to reduce its reliance on offshore mitigation to meet the first NDC, it will need to actively manage how the NZ ETS emissions cap is set over time.

# The NZ ETS will need to evolve further to operate effectively in the 2030s

A credible, predictable and effective NZ ETS does not mean that the scheme can never change. Rather, it will require the considered evolution of the NZ ETS, alongside other policies, in a way that is well-signalled and consistent with the emissions reduction targets Aotearoa New Zealand is seeking to achieve.

Looking ahead to the 2030s, there are features of the current NZ ETS design that are likely to create challenges for managing the scheme's settings, or hinder its effectiveness. While this may seem some years away, the Commission's NZ ETS settings advice will extend into the 2030s from next year, to cover 2031, the first year of the third emissions budget.

<sup>&</sup>lt;sup>xv</sup> We provided more detail on this issue in our advice last year, *Advice on NZ ETS Unit Limits and Price Control Settings 2024*.

<sup>&</sup>lt;sup>xvi</sup> We discussed this in more detail in the Commission's 2022 advice on NZ ETS unit limits and price control settings.

It is not yet clear what the Government's approach to managing the NZ ETS emissions cap in the 2030s will be. In the second emissions reduction plan, the Government set out a provisional NZ ETS emissions cap for 2026–2030 based on the latest emissions projections, which we have factored into this advice. However, these projections do not meet the third emissions budget. Consequently, there is a question about what NZ ETS emissions cap to implement for the NZ ETS settings from 2031 onwards.

Ideally the emissions cap would be compatible with the Government's wider approach to climate policy and effort sharing across sectors. Further guidance, or a framework for how the emissions cap will be managed, would provide useful clarification for the market and a basis for the NZ ETS settings.

The ability of the NZ ETS to continue to contribute to achieving emissions reduction targets in the 2030s will also be called into question if the design of the NZ ETS remains largely unchanged. For example, if industrial free allocation continues in line with current policy and forecasts, it is likely to exceed the NZ ETS emissions cap during the 2030s – which would increase costs to the Government of achieving targets.

Furthermore, auction volumes will decrease as the emissions cap reduces towards zero, and unit supply from forestry is expected to start dominating the scheme. The influence and relevance of the price control settings will diminish, and the NZ ETS price would likely tend towards the relatively low marginal cost of forestry. If in the 2030s Aotearoa New Zealand needs to further decarbonise to meets its targets, other tools or policies may need to be used – as the NZ ETS may not be capable of driving material gross emissions reductions.

Considered evolution of the NZ ETS to address these issues in a predictable manner, alongside other policies, will contribute to the credibility of the scheme and the confidence of the private sector to invest in reducing emissions.

# PART 3: Te herenga utu – Unit limits

# This part contains our advice about NZ ETS unit limits for the years 2026–2030.

Unit limits aim to cap the emissions allowed under the NZ ETS in accordance with Aotearoa New Zealand's emissions budgets, the 2050 target, and nationally determined contributions under the Paris Agreement. Capping emissions under the scheme enables the NZ ETS to support meeting these emissions reduction targets.

The Climate Change Response Act 2002 requires annual updates to three unit limits across a five-year window:

- a limit on the New Zealand Units (NZUs) available by auction (NZUs for planned auctions and cost containment reserve NZUs)
- a limit on approved overseas units
- an overall limit on units (NZUs available by auction, overseas units, and industrial free allocation).

The Act requires the Commission to recommend unit limits which, in combination with the price control settings, either 'strictly accord', or 'accord' with emissions reduction targets.<sup>xvii</sup> We understand this to mean that we must recommend unit limits that align to a high degree to achieving all of the targets, in terms of the constraint that they place on future emissions. If we recommend unit limits that do not align to a high degree with achieving one or more emissions budget or NDC, the discrepancy must be justified. The recommended unit limits must still have a good likelihood of achieving what is required or the discrepancy must be one that can be made up for elsewhere.

# Summary and recommendations

He Pou a Rangi Climate Change Commission's recommended unit limits respond to developments in the market over the last year, account for updated data, and reflect refinements to the way we assess the units in the market.

Over the last year the Government has made decisions on its plans for achieving the first and second emissions budgets, on a provisional emissions cap for the NZ ETS as set out in the second emissions reduction plan, and on the target level for the second nationally determined contribution (NDC). We have accounted for these decisions in developing our recommendations.

<sup>&</sup>lt;sup>xvii</sup> Emissions reduction targets here refers to emissions budgets, nationally determined contributions (NDCs), and the 2050 target. The settings must strictly accord with the 2050 target. However, the settings need not strictly accord with emissions budgets or NDCs as long as any discrepancy is justified, after considering a range of matters set out in the Act (see section 30GC).

We consider that around 14 million more units could be auctioned over 2026–2030 than the current settings allow, while still aligning with the Government's emissions reduction targets. This reflects changing circumstances in the market rather than a change in emissions reduction ambition.

This updated assessment results from several factors. The Government has set out a different emissions cap for the NZ ETS. Our estimate of the surplus units in the market has declined faster than expected, mainly due to 7 million units not selling at auctions in 2024. We have also taken into account changes to production and policy that have lowered our forecast of industrial free allocation by over 4 million units over 2026–2030. We have also resolved an issue that previously caused a technical adjustment to be necessary in the calculation of the unit limits.

We recommend that the additional units be auctioned over 2028–2030, and that the existing unit limit settings for 2026 and 2027 remain unchanged. We consider that there is no justification for changing the settings for 2026 and 2027, for four reasons:

- Particular care must be taken when increasing auction volumes, due to the asymmetric nature of the risk it presents to how unit limits align with emissions reduction targets. Auctioning units is a one-sided lever – it can only supply units, it cannot withdraw units from circulation once they have entered the market. Because of this asymmetric risk, we are more cautious about auctioning more units than we are about situations where our analysis suggests fewer units should be auctioned, such as occurred last year.
- 2. While our analysis indicates that surplus units are being drawn down faster than expected, there remains significant uncertainty in our estimate of the surplus. If the surplus is higher than anticipated, backloading the additional volume into the latter part of the 2026–2030 period provides more opportunity to adjust course as new information comes to hand.
- 3. The price of NZUs on the secondary market is currently below the auction reserve price, and the most recent auctions have declined or only partially cleared. Along with feedback we heard in engagement that there is ample liquidity, this indicates that significant additional supply in the market is not needed in the short term.
- 4. We heard strong feedback through our engagement with market participants that the Government and the Commission should be very reluctant to change the first two years of the NZ ETS settings. Changes to those years are very disruptive to market participants' planning and commercial arrangements, so should only be made if absolutely necessary. We consider that the auction volumes can be distributed via changes to the 2028–2030 settings without unduly disrupting the operation of the market, making it undesirable to recommend changes to 2026–2027.

Table 3.1: Current auction volumes and proposed updates

.Million units	2026	2027	2028	2029	2030
Current auction volumes (excluding CCR)	5.2	4.3	3.3	2.4	1.7
Proposed updated auction volume (excluding CCR)	5.2	4.3	7.0	7.0	7.0

# Method for determining the unit limits

In our advice for the previous three years, we applied a seven-step method to determine the unit volumes. We have used the same approach to developing this year's advice. These steps are set out below:

- 1. Align with emissions reduction targets
- 2. Allocate volume to NZ ETS and non-NZ ETS sectors ('set the emissions cap')
- 3. Technical adjustments
- 4. Account for industrial free allocation volumes
- 5. Set reduction volume to address unit surplus including set a base surplus and annual unit reduction volumes (5a) and adjust for discrepancies (5b)
- 6. Set approved overseas unit limit
- 7. Calculate the auction volume and assess risks.

The remainder of Part 3 summarises the analysis undertaken under each of these steps, and sets out the Commission's conclusion or recommendations for each. These seven steps lead to our proposed annual auction volumes.

In December 2024 the Government published the second emissions reduction plan. This plan set out the Government's position on how it expects to use the NZ ETS to meet its emissions reduction targets, including a decision on a provisional emissions cap for the NZ ETS.

Where applicable, the Commission's advice in these steps reflects decisions made by the Government in the second emissions reduction plan. This is because the way the NZ ETS is managed needs to be compatible with the Government's overall climate policy package.

Further detail on all the steps, including more detailed data and description of the methodology, can be found in *Technical Annex 1: Unit limit settings*, published separately on our website.

The last component of our advice on unit limits looks at the volume of NZUs in the cost containment reserve. When combined with the base annual auction volume, this results in the recommended limit on NZUs available by auction. The cost containment reserve is considered in *Part 4: Te ritenga taura-utu – Price control settings*.

The consolidated recommendations for unit limits, including the overall unit limits and a comparison with current settings, are presented in *Part 5: Te taupoki – Final recommendations,* of this advice.

## **Adaptive management**

Our method for calculating unit limits follows an adaptive management approach, consistent with the system under the Act. The annual updates process allows us to monitor trends and new information over time. In this way, assumptions and judgements that informed existing regulations can be reassessed and amended in future settings advice if needed, along with extending the settings by a year.

A key reason this annual review system was established is that the Government's decisions on these settings must be made based on inherently uncertain information, such as emissions projections or forecasts of unit flows. This creates a need to regularly revisit the settings. As time passes, actual data becomes available that inevitably differs from the projections that informed the settings approved in regulations previously.

We have heard concerns that some elements of our analysis are uncertain. However, some uncertainty is unavoidable as it is built into the design of the NZ ETS. For example, the volume of industrial free allocation in the NZ ETS changes with firms' production levels each year, and the voluntary participation of post-1989 forests means that the NZ ETS's coverage of forestry emissions and removals can change significantly over time as forests register or deregister from the scheme. This year, we have refined the methodology we use to estimate surplus units in a way that we expect will minimise some future changes that would otherwise have to be made.

# Step 1: Align with emissions reduction targets

Our advice on unit limits and price control settings is required to accord with the emissions budgets and NDCs that have been set, and with the 2050 target. The first step for advising on the unit limits in the NZ ETS is determining the most appropriate way to align the unit limits with these different targets. Once this is determined, the unit limit volumes can be calculated in alignment with achieving them.

As in previous years, we have aligned our advice with achieving emissions budgets as the domestic component of the first NDC, and as stepping stones to the 2050 target. We do this on the basis that the Government has committed that it intends to obtain the offshore mitigation necessary to meet the first NDC. Our advice here is conditional on the Government making good on that intention.

Previous assessments from the Commission and the Government have shown that part of the first NDC will need to be met through offshore mitigation. This is because of the time required for technological advancement, behaviour change and investment to reduce emissions domestically, and the need to balance domestic emissions reductions with managing economic and social disruption.

In December 2024 the Government released Aotearoa New Zealand's second emissions reduction plan, and the first Biennial Transparency Report. Projections from the second emissions reduction plan forecast that emissions will be below the levels of the first (2022–2025) and second (2026–2030) emissions budgets. However, the current projections show
emissions higher than the third emissions budget, and significantly higher than the level of the first NDC. The first Biennial Transparency Report noted that the Government expected to need 84–89 MtCO<sub>2</sub>e offshore mitigation to meet the first NDC.<sup>12</sup>

According to the Biennial Transparency Report, the Government has established relationships with potential partner countries and is participating in multilateral funds that could provide avenues to acquire offshore mitigation in future. In addition, the successful conclusion of negotiations in 2024 to establish the Paris Agreement Crediting Mechanism provides an additional avenue for the Government to acquire offshore mitigation. However, to the Commission's knowledge, the Government has not yet concluded agreements to acquire any offshore mitigation towards the first NDC.

We consider that it is still viable for the Government to acquire the offshore mitigation necessary to meet the first NDC. However, as the time to the end of the NDC period (2030) elapses, it will become increasingly difficult to acquire the necessary volume since contributing emissions reductions must occur before 2031. We also expect that offshore mitigation will become more expensive closer to 2030 as Aotearoa New Zealand competes with other countries to obtain offshore mitigation to meet their NDCs.

The Government has not decided on the NZ ETS's role in delivering offshore mitigation to meet the first NDC. While the NZ ETS could potentially be used to deliver some offshore mitigation, it would not be possible for it to deliver the full amount needed. This is because there is not enough planned auction volume under the current NZ ETS settings and architecture. The overseas unit limit in the scheme is currently set at zero. This recognises that until and unless overseas units are made available and are approved for use in the NZ ETS, offshore mitigation required to meet the NDC cannot be delivered by the NZ ETS.

In addition to current emissions budgets and NDCs (and the 2050 target), the NZ ETS settings are also required to accord with future budgets and NDCs where these have been set. Since our 2024 advice, the Government has also announced the target level for the second NDC. It has set a target reduction for net emissions of 51–55% below 2005 gross emissions by 2035. The level for the second NDC is closely aligned with the emissions trajectory needed for the third emissions budget.

# **Analysis and findings**

We consider that aligning the unit limits and price control settings with achieving emissions budgets remains the best approach. Emission budgets are the stepping-stones to achieving the 2050 target, and the third emissions budget aligns closely to the target level for the second NDC.

This is a higher level of emissions than allowed by the first NDC. We consider that the discrepancy to the first NDC is justified after considering relevant matters because:

- The gap can be made up for elsewhere through offshore mitigation. The Government's official communications and statements continue to affirm that it is seeking offshore mitigation to meet the first NDC.<sup>xviii</sup>
- At the time the first NDC was set, it was expected that offshore mitigation would contribute to meeting it. The level of ambition of the first NDC was intentionally set higher than what was expected could be achieved domestically.
- Our assessment is that it continues to be viable for the Government to acquire this offshore mitigation particularly given the successful conclusion of negotiations that will enable implementation of the centralised crediting mechanism under Article 6.4 of the Paris Agreement.<sup>xix</sup> However, it is likely to become more difficult and costlier to acquire the offshore mitigation as 2030 approaches, as time to obtain the offshore mitigation within the period shortens and Aotearoa New Zealand has to compete with other countries for what is available.
- The NZ ETS does not have the coverage, nor the time, to deliver the full emissions reductions needed to meet the first NDC domestically. Approximately 57% of gross emissions are outside the NZ ETS. The remaining auction volume to 2030 that could be replaced by requiring NZ ETS participants to surrender overseas units amounts to less than half of the gap to the first NDC.
- The combination of the depth of reductions needed, and the short time remaining to 2030, mean there is insufficient time to reduce emissions across sectors through the substitution of technology, and that instead many emitting activities would have to cease. This would be extremely disruptive for people and businesses, and could threaten social licence for the long-term transition.

We provide further information about this issue in *Technical Annex 3: Assessment of accordance,* published separately on our website.

### Aligning with emissions budgets

Having concluded that aligning the unit limits with achieving emissions budgets remains the best approach, a further decision is needed about the overall emissions level to align the settings to the notified emissions budget level, or something lower.

This year's settings apply over the period 2026–2030, which aligns with the timeframe of the second emissions budget. Emission projections released as part of the second emissions reduction plan show that, based on current policies, emissions are expected to be below the

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<sup>&</sup>lt;sup>xviii</sup> See, for example, Aotearoa New Zealand's formal submission of the first NDC to the UNFCCC secretariat, the First Biennial Transparency Report, the first emissions reduction plan.

<sup>&</sup>lt;sup>xix</sup> The Paris Agreement provides two avenues for obtaining offshore mitigation that can contribute to a Party's NDC. The first is through bilateral arrangements with other countries under Article 6.2 of the Paris Agreement. The second is through the central mechanism to be established under Article 6.4 of the Paris Agreement. Up until recently, the details to enable the operation of the Article 6.4 mechanism had not been agreed, but the necessary guidance was provided in Decisions made by Parties in November 2024. It is now possible that the Article 6.4 mechanism will be fully functioning in time for the Government to use it to help meet the first NDC.

notified levels of the first and second emissions budgets, but above the level of the third emissions budget.

In the second emissions reduction plan the Government indicated that it plans to set the emissions cap for the NZ ETS based on these projections, aiming to overachieve the second emissions budget.<sup>13</sup> The Commission has previously recommended aiming to overachieve emissions budgets, as this allows for uncertainty in policy effectiveness and provides confidence that budgets will be met. Aiming to overachieve on the first and second emissions budgets can also reduce the amount of offshore mitigation needed to meet the first NDC.

**Table 3.2:** Domestic emissions budgets compared to emissions projections from the second emissions reduction plan

	(MtCO <sub>2</sub> e)						
Budget period	Notified budget	Projected emissions	Difference				
Second (2026–2030)	305.0	303.1	-1.9				
Third (2031–2035)	240.0	249.2	+ 9.2				

Accordingly, over 2026–2030 we have aligned our calculation of the unit limits to the emissions level given by the emissions projections in the Government's second emissions reduction plan, rather than to the notified level of the second emissions budget.

To align with the third emissions budget and second NDC, deeper reductions in net emissions will be needed than indicated by the current emissions projections. We consider that aligning the unit limits with these projections over 2026–2030 is still in accordance with the third emissions budget and second NDC, since the deeper reductions are not required until after the period of this advice.<sup>xx</sup> Future advice that does cover part of the third emissions budget and second NDC period (2031–2035) can align with an adjusted pathway that accounts for the additional reductions needed.

#### Aligning with the 2050 target

In addition to emissions budgets and NDCs, the unit limits and price control settings are required to accord with meeting the 2050 target. Emissions budgets are intended to step down over time towards the 2050 target. They act as interim targets to ensure the target for 2050 is also met.

The emissions projections set out in the second emissions reduction plan meet the 2050 target. Therefore, we consider that aligning the unit limits to achieving the emissions budgets, using the emissions projections above and where relevant, to an emissions pathway that meets the third emissions budget, also aligns with the 2050 target.

<sup>&</sup>lt;sup>xx</sup> Where our analysis this year draws on existing projections beyond 2030, we have made an adjustment to bring the limits back into alignment with meeting the third emissions budget. See step 5 for details.

# Step 2: Allocate volume to NZ ETS and non-NZ ETS sectors

This step is about how Aotearoa New Zealand's emissions reduction goals are shared between NZ ETS and non-NZ ETS sectors. This is sometimes referred to as setting the NZ ETS emissions cap, where the 'cap' refers to the targeted level of emissions for sectors covered by the NZ ETS.

# **Analysis and findings**

In its second emissions reduction plan, the Government set out a decision on a provisional emissions cap. For reasons noted earlier, we have incorporated that provisional cap into our development of this unit limit advice.

The split of emissions between NZ ETS and non-NZ ETS sectors used in the Government's provisional emissions cap for 2026–2030 is not as granular as the split we have used in the past for determining the units limits. We have therefore taken the Government's guidance on the allocation of emissions budget volume to NZ ETS and non-NZ ETS sectors, and applied our more detailed methodology to determine the emissions allocation to NZ ETS sectors. We have used the same methodology for determining the emissions allocated to NZ ETS sectors as we used last year. More detail can be found in *Technical Annex 1: Unit limit settings*, published separately on our website.

To date the Government has not given an indication of how it would approach setting the NZ ETS emissions cap over the third emissions budget period (2031–2035). In step 5 of our unit limits methodology, we need to assume an emissions cap for the early years of the 2030s for the purposes of estimating the units needed by emitters for hedging in 2030. We discuss how we have done this later in this chapter, see step 5 for more information.

# Step 3: Technical adjustments

In this step we review past emissions reported in the NZ ETS and in New Zealand's Greenhouse Gas Inventory (GHG Inventory), to identify possible discrepancies. This is important since the GHG Inventory is used to measure progress against the budgets.

# **Analysis and findings**

In our 2024 advice we identified that lower emissions were reported in the NZ ETS for the liquid fossil fuels (LFF) and fossil gas sectors compared to the GHG Inventory. Although the cause of the discrepancy was not identified at the time, we recommended an ongoing annual technical adjustment consistent with 3% of projected LFF and gas emissions (0.7–0.8 million units per year across 2025–2029).

In our most recent analysis, we reviewed the discrepancy between LFF and fossil gas in further detail to better identify the underlying cause. After further discussion with the Ministry for the Environment and the Ministry of Business, Innovation and Employment, we determined that previous analysis double counted liquified petroleum gas emissions from

the GHG Inventory. Correcting this has resulted in a close historical alignment between the two datasets.

We now conclude that there is no need to incorporate an ongoing technical adjustment related to LFF and fossil gas into the settings.

This year, our analysis also identified a discrepancy between waste emissions reported in the NZ ETS compared to the GHG Inventory. The Ministry for the Environment has indicated that this is connected to an error in the calculation of Unique Emissions Factors (UEFs) for several waste disposal facilities. The Ministry expects to fix the issue in 2025, before the first year (2026) of the settings we are recommending. Based on this, we judge that there is no need to incorporate a technical adjustment for this issue. We will monitor this next year to confirm that the discrepancy has been resolved as expected.

# Step 4: Account for industrial free allocation

Industrial free allocation refers to the free NZUs provided by the Government to entities whose activities are both emissions-intensive and trade-exposed (EITE). Industrial free allocation reduces the total amount of NZUs available for the Government to auction within the emissions volume allocated to NZ ETS sectors.

The amount of NZUs given out each year via industrial free allocation is not determined as part of the NZ ETS settings annual process. The rules governing industrial free allocation are in separate provisions of the Act and associated regulations. We signalled in our advice last year that the Government was undertaking a process to update the allocative baselines in these regulations.

In October 2024 the Government completed the updates to the allocative baselines, which are used to calculate the amount of industrial free allocation provided for EITE activities each year. The revised baselines apply from 1 January 2025. Allocative baselines for most activities decreased, although some baselines increased. More information on these changes is available on the Ministry for the Environment's website.<sup>xxi</sup>

For this step, we updated forecast industrial free allocation volumes based on the updated baselines and likely production levels of EITE activities over the next five years.

# **Analysis and findings**

Our forecast of industrial free allocation volumes has reduced significantly from last year's advice. Expected industrial free allocation over 2026–2030 has reduced from 27.6 million to 23.2 million NZUs.

<sup>&</sup>lt;sup>xxi</sup> At <u>https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/ets/participating-in-the-nz-ets/overview-of-industrial-allocation/</u>

There are three reasons for the reduced forecast:

- The overall net impact of the 2024 update to allocative baselines results in a reduction in total allocation volumes.
- We have reset our base assumptions for production levels using actual industrial allocation data released in 2024.
- We have incorporated new assumptions regarding decreased production levels of methanol and pulp and paper products, based on recent public announcements from Methanex and Oji Fibre Solutions.

Our forecast includes the annual updates to the allocation factor for the New Zealand Aluminium Smelter (NZAS) to account for changes in its electricity use. It also includes the expected change to the allocative baseline for NZ Steel that will occur in 2026 based on its planned installation of an electric arc furnace. More information on these decisions is available on the Ministry for the Environment's website.<sup>14</sup>

# Step 5: Set the unit surplus reduction volume

In this step, we estimate how many of the units currently in the NZ ETS market are surplus and how to address them over time. Determining how many units are surplus is important because these units create risk that emissions budgets will be exceeded.

This step includes:

- **Step 5a**: our estimate of surplus units held in private accounts and how to address it over time
- **Step 5b**: a discrepancy adjustment, developed to address the impacts of potential updates to unit limits that are unable to be made due to regulatory limitations around when settings can be updated in the five-year rolling process.

# **Analysis and findings**

#### Step 5a: Set surplus reduction volumes

In our NZ ETS settings advice to date, our estimate of surplus units has been based on subtracting three categories of units that we consider unlikely to be available to the market from the total volume of units held in private accounts (sometimes referred to as the stockpile). These three categories are:

- pre-1990 forest allocation units held long term
- units held for post-1989 forest harvest liabilities
- units held for hedging purposes by emitters.

This year we have updated our surplus estimate by including the most recent data relevant to each of these categories of units, and incorporating several refinements to our surplus estimate methodology. This is part of a process of continuous improvement. Some methodological refinements result from our consideration of a 2024 EY report (commissioned by the Ministry for the Environment) that reviewed the surplus methodology.<sup>xxii</sup> Others result from our own analysis.

The refinements this year include incorporating two further categories of units into our methodology for estimating the unit surplus:

- units held by emitters for emissions that have already occurred (holding volumes)
- post-1989 forestry units relating to the fourth mandatory emissions reporting period (2023–2025) that may be carried over into the second emissions budget period and contribute to the surplus.

Our estimate of the surplus as of the end of 2024 is 50.2 million units, which is notably lower than the 67.9 million units estimated in last year's advice as of the end of 2023.

The reasons for the 17.7 million unit reduction to the surplus estimate are:

- the 7.7 million unit surplus reduction volume implemented into the settings for the 2024 year
- declined auctions in 2024, which meant that 7.1 million fewer NZUs than expected were allocated into the market, and
- the refinements to our surplus estimate methodology, which, alongside updated data, contribute about 3 million units to the reduction in the estimate.

The surplus is dynamic and many factors, including the changing behaviour of NZ ETS participants, can influence how it changes over time, so there is significant uncertainty in our estimate of it. Our central estimate of 50 million units as at the end of 2024 is within a range of 28–68 million units.

We discuss the basis and effect of the contributing factors to our updated surplus estimate in the sections below. More detailed descriptions of the approaches to estimating each category are set out in *Technical Annex 1: Unit limit settings,* published separately on our website.

#### Total unit holdings

Total private unit holdings in the NZ ETS registry, sometimes referred to as 'the stockpile', have decreased from 160.8 million units as of late 2023,<sup>xxiii</sup> to 150.4 million units at the end of December 2024. The decrease reflects that more units have been surrendered for emissions liabilities over the past year than have been allocated into the market due to auctions, industrial free allocation and forestry activities.

<sup>&</sup>lt;sup>xxii</sup> The report, *New Zealand's Emissions Trading Scheme (ETS) NZU Surplus Advice*, is available on the Ministry for the Environment's website: <u>https://environment.govt.nz/assets/publications/climate-change/nzets-nzu-surplus-advice.pdf</u>

<sup>&</sup>lt;sup>xxiii</sup> This data was from the end of September 2023, due to the February due date of our 2024 advice. The Government used the updated December 2023 stockpile data, as we recommended, for the final unit limit regulations.

#### Pre-1990 forest allocation units held long term

When the NZ ETS was established, there was a one-off allocation of units to owners of forests planted before 1990 (pre-1990 forest). In line with our previous advice, we continue to assume that a proportion of these units (pre-1990 units) will be held long term and not come to market over the period to 2030.

We have examined updated data on transfers of pre-1990 units. Our updated central estimate indicates that, of approximately 11.5 million pre-1990 units currently held in the accounts they were originally allocated to, approximately 5.6 million units are unlikely to become available to the market by 2030.

#### Units held for post-1989 harvest liabilities

Since our last advice, our estimate of units held for post-1989 forest harvest liabilities has decreased from approximately 58 million to 53 million units. This is for two reasons:

- We have continued to improve and refine the forestry model that we use to provide an estimate of the total units held for post-1989 forest harvest liabilities.
- We have new data on actual forestry unit allocations and surrenders that have already occurred over 2023 and 2024.

The forestry model uses assumptions about the age at which forests are harvested, the proportion of forests that will remain unharvested, and the proportion of potential maximum 'low-risk carbon' foresters can achieve in managing their forest areas.

The EY report recommended that the average harvest age be determined based on a weighted average by area.<sup>15</sup> We have applied this approach, using a more comprehensive forestry dataset to determine the weighted average than EY used to do so. We also adjusted our methodology for estimating the proportion of 'low-risk carbon' units available, to account for the fact that owners of large areas of forest have greater flexibility in managing their harvest liabilities across different forest stands compared to owners of smaller areas.

An additional change is that we have adjusted our estimate to account for data on actual units allocated and surrendered for post-1989 forests for 2023 and 2024. Taken together, this results in a final estimate of post-1989 units held for harvest of 53.1 million units.

#### Units held for hedging by emitters

Our estimate of units held for forward hedging by emitters has reduced from 28.3 million to 17.4 million units. This is mainly due to two adjustments to our methodology:

- We have reduced our estimate of hedging by the liquid fossil fuels sector, as recommended by EY in its report.
- We have adjusted the base year of our estimate of units held for hedging to use the volume forecast for 2030 instead of using the volume from the most recently completed calendar year (2024).

We propose to change the base year for hedging estimates to 2030, to account for the fact that, as emissions reduce, the units needed for hedging will also reduce. This means that

some of the units currently held for this purpose will become surplus by 2030, unless future changes to hedging volumes are factored in now. By shifting our estimate of necessary hedging volumes to the end of the settings period, we ensure that we are aligning unit volumes with the goal of fully reducing the surplus units in the NZ ETS by 2030.

To estimate the necessary forward hedging volume in 2030, we have had to assume an emissions cap for the NZ ETS over the third emissions budget, as noted in step 2 earlier in this chapter.

We have done this by assuming the additional abatement needed to meet the third emissions budget over 2031–2035 will need to be delivered by NZ ETS sectors. This is based on the logic that, within this advice, the NZ ETS is the only tool available to drive additional emissions reductions. We cannot assume additional reductions will come from outside the NZ ETS, given current emissions projections and the Government's stated policy approach that the NZ ETS is its main policy tool to reduce emissions.

We note that this is an assumption we are making for the purposes of this analysis, based on current circumstances. It does not represent the Commission's advice on how to approach setting the emissions cap for the NZ ETS from first principles. If the Government makes decisions on the expected balance of reductions to occur after 2030 across NZ ETS and non-NZ ETS sectors, we will consider that in how this assumption is updated in future advice.

#### Units held for surrender for past emissions (holding volume)

This year we have incorporated into our methodology a new category of non-surplus units, referred to as 'holding volume'. This change was in response to a suggestion made by EY in their report. The report distinguishes between units held for future emissions (hedging volume) and units held for surrender for emissions that have already occurred (holding volume).

Emitters will accumulate units over the year for emissions that have occurred, increasing to a peak in May when units are due to be surrendered. Following the surrender period in May the holding volume falls to a minimum, before growing again. The EY report recommended that the holding volume be accounted for separately from the hedging volume when estimating the unit surplus.

The scale of the holding volume varies throughout the year, and so the volume to be used depends on the point in the year the registry stockpile data is taken from for the unit limits analysis. We assess the unit stockpile at the end of the calendar year to account for the final results of auctions, and therefore also take the holding volume from the end of the year. We assume that emitters are accumulating units to match their emissions throughout the year, so by year-end approximately 100% of emitters' obligations from that year are held.<sup>xxiv</sup>

<sup>&</sup>lt;sup>xxiv</sup> More specifically, we assume that the units to be surrendered exist in the stockpile by the end of the calendar year. Whether they are held by emitters directly, indirectly via third parties, or are yet to be purchased does not affect the overall calculation of the surplus so long as the units are in the registry.

Therefore, our holding volume is based on the estimate of emissions that occurred in 2024. This is 34.2 million units based on the gross emissions forecast in the Government's emissions projections and NZ ETS emissions cap. We expect this full volume will be surrendered in May 2025, at which point it will be removed from the stockpile.

Our assessment is that the holding volume related to past emissions is additional to the volume held for forward hedging. However, since our targeted engagement for this advice occurred before the EY report's release, we were unable to thoroughly test this with participants. It is possible that the inclusion of the holding volume may partially overlap with the units held for hedging in some sectors. We suggest that the Government seek feedback on our assumptions about holding and hedging volumes during its consultation.

#### Additional surplus units from post-1989 forestry unit allocations at the end of MERP4

This year we identified a need to anticipate the impact of forestry units expected to be allocated after the fourth mandatory emissions reporting period (MERP4) ends. This will help avoid an unexpected surplus increase in our 2027 advice after final unit allocations are completed for MERP4, which covers the period 2023–2025.

A proportion of the post-1989 forestry units earned over the MERP4 period will only be allocated into the market after participants submit their end-of-MERP final emissions returns in June 2026. This means that the removals will have occurred in the first emissions budget, but the NZUs issued for them could allow emissions in the second emissions budget.

We have estimated that, of the forecast post-1989 forestry units that remain to be issued up to the end of MERP4, 10 million of them are likely to add to the surplus. We have worked this out by considering the modelled low-risk carbon units that remain to be allocated and comparing this volume to the projected demand within the NZ ETS above the net emissions cap over 2023–2025 (MERP4). We include these units in our estimate of the total unit surplus to be reduced by 2030. More detail on the approach to estimating this contribution to the surplus is included in *Technical Annex 1: Unit limit settings*, published separately on our website.

#### Reducing the surplus over time

In our previous advice, we reduced auction volumes to require participants to use the surplus units already available in the market. This approach reduces the risk the surplus poses to achieving emissions budgets. The annual reduction volume was intended to reduce the surplus to zero by 2030 with the reduction each year calculated as a constant proportion of the NZ ETS emissions cap.

We consider that this approach, and the aim of reducing the surplus by 2030, is still suitable. It continues to be important to reduce the probability that the risks presented by the surplus continue into the third emissions budget period.



**Figure 3.1:** Comparison of our previous and current estimated breakdown of unit holdings in private accounts (the stockpile) and of other units contributing to the surplus estimate

Source: Commission analysis

#### Step 5b: Adjust for discrepancies

In this step we make adjustments to address potential updates to unit limits that are unable to be made due to limitations around when settings can be updated in the five-year rolling process. *Part 1: Te taupuaki – Introduction* describes the five-year rolling process and the rules determining when changes can be made.

#### Determining which years of the unit limits to amend

Within this round of advice, there have been changes in unit volume estimates associated with all steps in the methodology to reach final auction volumes. The combination of changes results in higher auction volume available over the 2026–2030 period than previously recommended.

The Act allows the settings for 2026 and 2027 to be changed under certain circumstances. The relevant issue for the Commission's advice this year is whether there has been a change that has significantly affected any matter required to be considered, and whether any such change justifies the amendment of the first two years of the settings. While the change in auction volumes may be significant, we consider that the increased auction volume does not justify changing settings for 2026–2027, and can be suitably addressed though adjusting the latter years' settings (2028–2030).

The four key reasons supporting this judgement are that:

 Auctioning is a one-sided tool – it can add more units to the market, but it cannot claw them back.

- There is significant uncertainty in our estimate of the surplus units. Auctioning the additional volume later in the settings period allows more time to adjust if new information shows that there are more surplus units than we expect.
- The current spot price for NZUs is low and recent auctions have either declined or only partially cleared, indicating that participants do not need more units above current supply in the short term.
- In our engagement, market participants have stressed that changes to the first two years are very disruptive for their commercial arrangements so should be avoided if at all possible.

The auctioning of units is a one-sided mechanism in terms of its market influence. If too few units are auctioned, it is possible to make up for that by auctioning more units later. However, if too many are auctioned, they cannot be removed from the market other than by reducing future auction volumes. This becomes more challenging as the NZ ETS emissions cap declines over time, as there is less and less auction volume that can be reduced.

There is also significant uncertainty in our estimate of the surplus of units. If the surplus is towards the larger end of our uncertainty range, then adding more auction volumes is likely to allow higher emissions than emissions budgets.

At the time of writing, secondary market spot NZU prices sit below the auction reserve price, and recent auctions have either declined or only partially cleared. This shows that participants likely see the unit supply provided for by the current unit limit settings (as well as from forestry) as sufficient for their needs in the short term. Making the increase in auction volume available from 2028 gives more time to see how the market develops and adjust if necessary.

Market participants have also emphasised to us that changes to these two years disrupt their commercial arrangements and are very destabilising for them. As there is a suitable option available to distribute the additional auction volume over 2028–2030, we consider it neither justified nor desirable to recommend amendments to the first two years of the settings.

Since we do not propose changes to the unit limits for 2026–2027, we propose the use of a discrepancy adjustment to be applied to 2028–2030. This accounts for the volume changes that otherwise would have been implemented to those first two years, as well as any discrepancies between regulations and our updated estimates of unit requirements in 2025.

The discrepancy adjustment has been calculated for the 2025–2027 period and sums to 4.4 million units. This reflects the differences in the NZ ETS emissions cap, industrial free allocation forecasts and removal of the technical adjustment. This volume is divided and added to the calculated auction volumes for 2028–2030.

# Step 6: Set the approved overseas unit limit

As discussed in *Part 2: Te hanga me te haepapa o NZ ETS – Current state and role of the NZ ETS* of this advice, and in step 1 of this chapter, there are no overseas units approved for use

in the NZ ETS. The Government has yet to provide clarity on if and when overseas units might be available, and Government decisions on the role of the NZ ETS in the delivery of offshore mitigation are still pending as it develops a plan for meeting the first NDC.

# Analysis and findings

Due to the absence of approved overseas units at this time, we recommend retaining the status quo approach of setting the limit on approved overseas units at zero. This is explained in more detail in steps 1 and 6 of our NZ ETS settings advice from 2022 and 2023.

# Step 7: Calculate the auction volume and assess risks

This final step uses the outcomes of the previous six steps to identify the proposed annual auction volumes for the 2026–2030 period. These proposed annual auction volumes are a significant part of what informs the Commission's final recommendation for the limit on NZUs available by auction and the overall unit limit.

This step also involves assessing the sensitivity and risks associated with these volumes, to provide information about which judgements or uncertainties have the most impact on final auction volumes now, or could cause auction volumes to be revised in future iterations of the NZ ETS settings advice.

# **Analysis and findings**

Our final unit limit recommendations as required under the Act, including additional CCR volumes, are summarised in *Part 5: Te Taupoki – Final recommendations*.

### Step 7a: Set base auction volumes

The updated auction volume calculations, based on the NZ ETS emissions cap and subtracting from it the volumes from steps 3–5, result in 30.5m units being available to be auctioned over 2026-2030, 13.6m more than current regulations have set.

In summary, the factors contributing to the increased available auction volume are:xxv

- 2024 auctions not selling all units available (+7.1m)
- Lower forecasts of industrial allocation (+4.4m)
- removal of a technical adjustment for liquid fossil fuels (+3.4m)
- an adjustment for methodological and data updates that cannot be made to 2025 settings (+3.1m)
- updated data and changes to our methodology to estimate the unit surplus (+2.4m<sup>xxvi</sup>).

<sup>&</sup>lt;sup>xxv</sup> The component changes here may not sum exactly to the difference in auction volumes due to rounding. <sup>xxvi</sup> The 2.4m difference in the surplus estimate from current regulations is slightly lower than the 3.0m change in surplus estimate from the Commission's 2024 advice referenced in step 5a. This is because in setting the 2024 regulations the Ministry for the Environment used updated data related to the surplus that became available after we gave our advice.

These factors are partially balanced out by the provisional NZ ETS cap being lower than the previous emissions cap (-6.7m).

#### Step 7b: Final auction volumes – distributing the auction volume over 2028–2030

Since we have concluded that circumstances do not justify changing the settings for 2026 and 2027 (step 5b), the resulting changes in auction volume will be apportioned over 2028–2030. The increased auction volume could be distributed over 2028–2030 in different ways.





Source: Commission analysis

The default approach, which we term **option 1**, would be to apportion the volume linearly over 2028–2030 so that it declines in line with the NZ ETS emissions cap. This results in more of the auction volume being added to 2028 than to 2029–2030. An alternative approach, **option 2**, would be to evenly spread the increase in auction volume across 2028–2030. This would see a smaller (but still significant) increase in auction volume in 2028, held constant until 2030, before auction volumes start to decline again in line with the NZ ETS cap from 2031. Both options distribute the same overall auction volume over 2028–2030.

Next year, when we again provide NZ ETS settings advice, barring any special circumstances we (and the Government) will not be permitted under the Act to recommend changes to the 2028 volumes. Given that restriction, along with the uncertainty and dynamic nature of the surplus estimate, we prefer option 2. Option 2 better manages the risk that auctioning more units presents to accordance with targets, as it preserves more volume in the later years of the settings, which can potentially be adjusted in 2026 and 2027 NZ ETS settings advice.

Similar to the consideration of amending the settings for 2026–2027 discussed above in step 5b, this judgement in favour of option 2 is also influenced by the fact that recent NZU

auctions have fully or partially declined, and the NZU spot price is currently tracking below the auction reserve price.

**Table 3.3** shows the steps (described above) that have been followed to reach our final proposed annual auction volumes. This shows no changes to 2026 and 2027, the associated discrepancy adjustment over 2028–2030 and the decision to evenly spread the increase in available auction volume over 2028–2030.

<b>Table 3.3:</b> Proposed annual auction volumes within the NZ ETS cap – summary of calculations from
applying the seven-step method

	No changes		Updated		New
Million units	2026	2027	2028	2029	2030
Step 1: Align with emissions reduction targets	65.7	63.4	60.4	57.9	55.2
Step 2: Allocate volume to sectors outside the NZ ETS	-42.3	-41.9	-42.8	-42.7	-42.6
Allocate volume to NZ ETS sectors (NZ ETS emissions cap)	23.4	21.4	17.6	15.1	12.6
Step 3: Technical adjustments	0.7	0.7	0.0	0.0	0.0
Step 4: Industrial free allocation	5.7	5.7	4.6	4.5	4.0
Step 5a: Surplus reduction	11.5	10.5	5.4	5.3	5.0
Step 5b: Discrepancy adjustment	0.3	0.3	-1.7	-1.5	-1.2
Step 6: Approved overseas units	0.0	0.0	0.0	0.0	0.0
Step 7a: Base auction volumes	5.2	4.3	9.2	6.8	5.1
Step 7b: Final auction volumes	5.2	4.3	7.0	7.0	7.0

\*Unit volume figures are rounded to one decimal place and columns may not sum due to rounding.





Source: Commission analysis

# Sensitivities, risks and future developments in auction volumes

Here we discuss the largest sensitivities, risks, and factors most likely to cause changes within the steps in our methodology. This is to highlight issues that could lead to the NZ ETS settings needing to be revised over time.

*Technical Annex 1: Unit limit settings*; its associated spreadsheet; *Technical Annex 2: Price control settings*; and *Technical Annex 3: Assessment of accordance*, all published separately on our website, cover our assessment in more depth. This includes covering how the NZ ETS settings, including the unit limits, align with the emissions reduction targets beyond 2030 (the third emissions budget and the 2050 target).

#### Step 1: Aligning with emissions reduction targets:

In 2025 the Government will need to review the second and third emissions budgets and set the fourth (2036–2040) emissions budget. These decisions will have a bearing on the Commission's future NZ ETS settings advice, as they have the potential to change the emissions goal the NZ ETS is being used to support. Depending on when in 2025 the Government confirms the reviewed emissions budgets, the Commission may or may not be able to incorporate it into our advice on recommended settings in early 2026.

<sup>&</sup>lt;sup>xxvii</sup> The data presented here for 2026 and 2027 differs from Table 3.3. The data in the table for those years shows how the auction volumes were derived using the information available when regulations were made in 2024. Figure 3.3 uses the latest updated data for industrial allocation and technical changes.

#### Step 2: Allocate the emissions volume to NZ ETS and non-NZ ETS sectors ('set the

**emissions cap'):** The second emissions reduction plan included emissions projections. It also included a decision by the Government on a provisional NZ ETS emissions cap based on the projections of emissions from NZ ETS sectors. We aligned the volumes allocated to the NZ ETS used in this advice with the emissions cap and projections provided in the second emissions reduction plan, since they forecast meeting the first and second emissions budgets.

However, the Government has not yet set out its intentions for the emissions cap beyond 2030. The most recent emissions projections do not meet the third emissions budget (2031–2035), so projections of emissions from NZ ETS sectors are unlikely to be suitable for use as the emissions cap beyond 2030. It would be helpful for the Government to clarify how it expects the emissions cap to be extended into the 2030s and whether (and how) it expects the cap to be adjusted as emissions projections change in future. This will become an issue for the NZ ETS from next year, when the unit limit settings will start to cover years in the third emissions budget period.

It is also currently unclear how the Government intends to meet the third emissions budget and what additional policies it might implement for this. Future changes to policies affecting forestry or agricultural emissions outside the NZ ETS could impact the emissions budget volume available to NZ ETS sectors.

Our estimate of forestry registered within the NZ ETS has a significant impact on the calculation of the emissions cap allocated to NZ ETS sectors. We currently assume that all new forecast afforestation will register within the NZ ETS, and that all historic forestry not currently registered will remain unregistered. This assumption could change depending on changes in Government policy.

The second emissions reduction plan described the Government's intended policy to partner with the private sector to plant trees on Crown-owned land. Information is not yet publicly available on the area of forests that this might deliver, or if these forests will be registered into the NZ ETS.

**Step 3: Technical adjustments:** In this round of advice, we propose that no technical adjustments be made, despite identifying a historical discrepancy in waste emissions. This is based on information provided by the Ministry for the Environment that the discrepancy is being addressed this year. If this is not the case, and the discrepancy continues, there is a risk that the recommended settings would need a technical adjustment in the future to better align the unit limits with targets.

**Step 4: Account for industrial free allocation:** This year we have updated our forecasts of industrial free allocation to include changes to allocative baselines released in June 2024. The Act generally does not allow these to be updated again for the next five years.<sup>xxviii</sup>

Major uncertainties in the forecasts remain with respect to potential changes in activity production levels, annual updates to the New Zealand Aluminium Smelter's electricity allocation factor, and the change in allocative baseline for NZ Steel after the expected installation of an electric arc furnace is completed in 2026.

**Step 5: Set the unit surplus reduction volume:** As we have emphasised in previous advice, there are significant uncertainties with respect to all aspects of estimating the surplus. Forestry is a key uncertainty, because large components of the estimated surplus could be affected by future decisions of foresters where they have flexibility to change approach, such as at what age and whether to harvest their forests. In this round of advice, we have considered the impact of foresters not having to submit returns for the 2023–2025 MERP4 period until 2026. However, this also involves significant uncertainties, and the final outcome of MERP4 forestry emissions and allocations will not be able to be reflected in our advice until 2027. MPI is likely to consult later in 2025 on updating the default carbon yield tables for exotic forests in the NZ ETS, and the outcome of this process could also have impacts on our estimates related to forestry units in future.<sup>16</sup>

Our annual surplus reduction volumes assume that all auction units are sold in 2025. However, this cannot be confirmed until the final unit auction in December 2025.

**Step 6: Setting the approved overseas unit limit:** The Government has not yet communicated decisions about obtaining offshore mitigation or approving overseas units for use in the NZ ETS. The end of the first NDC period is approaching, and clarifying what, if any, role the NZ ETS will play with regard to offshore mitigation will avoid risk and support the stable operation of the NZ ETS market.

<sup>&</sup>lt;sup>xxviii</sup> Climate Change Response Act, Section 161A(3A)(a). However exceptions are provided for in s161A(3B) for revisions to emissions factors, electricity allocation factors and exempted activities.

# PART 4: Te ritenga taura-utu – Price control settings

This part contains our analysis and recommendations for updating the price control settings that operate at government auctions of New Zealand Units (NZUs) for the years 2026–2030.

Under the Climate Change Response Act 2002, the price controls for NZU auctions consist of:

- An auction reserve price (ARP), a minimum price below which units cannot be sold at auction. The ARP can be set at zero.
- A cost containment reserve (CCR), a reserve amount of NZUs that is released for sale at auction, if a trigger price is reached or exceeded by bidding at the auction.

The price controls operate at government auctions of New Zealand Units (NZUs). They are safety valves to manage risks of price extremes in either direction, and to signal the bounds of the NZU prices likely needed to meet Aotearoa New Zealand's emissions reduction targets.

The price control settings do not set the NZU price, but can influence that price by withholding units from, or adding units to, the market. The levels of the ARP and CCR give a price range within which price discovery is largely expected to occur. However, the secondary market can (and has) traded outside the range of the price control settings.

The Act requires the Commission to recommend price control settings which, in combination with the unit limit settings, either 'strictly accord', or 'accord' with emissions reduction targets.<sup>xxix</sup> We understand this to mean that we must recommend price control settings that align to these targets to a high degree, in terms of the range of NZU prices that are likely to be needed to achieve them. Alternatively, if the Commission recommends price control settings that do not do this, the discrepancy must be justified. The recommended settings must still have a good likelihood of achieving what is required or the discrepancy must be one that can be made up for elsewhere.

# Summary and recommendations

He Pou a Rangi Climate Change Commission's recommendations on the price control settings are first and foremost informed by our analysis of the range of emissions prices that would be consistent with meeting emissions reduction targets. This is critical for the NZ ETS to play its role as the Government's main tool for reducing emissions. If the price control settings do not align with Aotearoa New Zealand's targets, then this will undermine the

<sup>&</sup>lt;sup>xxix</sup> Emissions reduction targets here refer to emissions budgets, nationally determined contributions (NDCs), and the 2050 target. The settings must strictly accord with the 2050 target. However, the settings need not strictly accord with emissions budgets or NDCs as long as any discrepancy is justified, after considering a range of matters set out in the Act (see section 30GC).

credibility of the scheme. It will also mean the scheme will not be able to encourage the cost-effective emissions reductions, across the economy, that the Government is relying on.

The publication of the Government's second emissions reduction plan in December 2024 has prompted us to fully reassess the suitability of the current CCR and ARP price levels. This new plan represents a different strategy for meeting emissions budgets, compared to the first emissions reduction plan.

Reassessing the price controls in light of the second emissions reduction plan required us to update the evidence base about the NZU prices that might be needed to meet the second and third emissions budgets, as the settings are required to be consistent with achieving both. Our analysis also factored in the considerable uncertainties involved in looking 10 years into the future to 2035, the end of the third budget period.

We conclude that both the CCR and the ARP remain fit for purpose for the time being. They align to a high degree to the NZU prices likely to be needed to meet the second emissions budget. They also align to a good degree to what may be needed to meet the third emissions budget and second nationally determined contribution (NDC), and with the first NDC (taking into account the issues set out in *Part 3: Te herenga utu – Unit limits*, step 1). We also consider that these existing settings align to a high degree to the 2050 target. This is because they align with emissions budgets – the stepping stones to the 2050 target – and the latest government emissions projections show Aotearoa New Zealand is on track to meet the 2050 target. See *Technical Annex 3: Assessment of accordance* for more information about our assessment of how our recommended price control settings align with targets.

We recommend that these price control settings be extended to 2030, and otherwise remain unchanged except for minor inflation adjustments.<sup>xxx</sup> We have not identified any reasons that would justify amending the first two years of the settings.

Our analysis finds that there is a risk that the CCR price triggers are too low to be consistent with meeting the third (2031–2035) emissions budget and the second NDC. However, there are large uncertainties about what actions will be needed to meet this budget and the NZU prices that might be required, so it is not clear that this risk will materialise. Some of this uncertainty could be resolved within two to three years. Rather than recommending an increase to the CCR now, we consider it acceptable to review this issue annually. The process for updating the regulations each year enables the adaptive management of the NZ ETS settings in this way.

Similarly, it is also unclear whether the ARP will need to continue its current or an increased upward trajectory into the 2030s, or whether from 2031 onwards it could be flattened out.

<sup>&</sup>lt;sup>xxx</sup> The inflation adjustments applied use the Treasury's consumer price index (CPI) inflation forecasts contained in the Half Year Economic and Fiscal Update 2024.

Cost containment reserve	No changes		Updated fo	New				
	2026	2027	2028	2029	2030			
Tier 1								
Trigger price	\$203	\$213	\$223	\$235	\$246			
Reserve volume (million units)	2.3	2.1	1.9	1.7	1.4			
		Tier 2						
Trigger price	\$254	\$267	\$279	\$293	\$308			
Reserve volume (million units)	4.2	3.8	3.4	3.0	2.5			

Table 4.1: Recommended price control settings for 2026–2030

Auction reserve price	No ch	anges	Updated for	or inflation	New
	2026	2027	2028	2029	2030
Auction reserve price	\$71	\$75	\$78	\$82	\$86

Based on current evidence we see no case for lowering the ARP, either now or in the future. As the Government stated in the second emissions reduction plan: "to deliver a credible NZ ETS, market participants must trust that governments will remain committed to targets and choose NZ ETS settings and other policy accordingly. This is important to give businesses the confidence to make long-term investment decisions that reduce emissions."<sup>17</sup> If the Government chose to lower the ARP, it would damage its efforts to rebuild confidence in a stable and credible NZ ETS and undermine investments in forestry and decarbonisation – both those that have already been made, and those that need to be made in future.

In the following sections, we summarise the relevance of the second emissions reduction plan for the price control settings. We then set out the evidence and analysis that underpins our conclusions on the CCR and ARP, and our consideration of whether to recommend a desirable price path. This part then closes with a summary of the state of knowledge about the impacts of emissions prices on households and the economy.

# The second emissions reduction plan

The second emissions reduction plan differs considerably from the first emissions reduction plan. It places more emphasis on the NZ ETS as the main tool for reducing emissions, and less on complementary policies.

This different strategy for meeting emissions budgets means that part of the evidence base on which the Commission has based its price controls recommendations so far is now out of date. The assumptions and scenarios in the Commission's modelling using the Energy and Emissions in New Zealand (ENZ) model, undertaken in 2022 to inform its first (2022) NZ ETS settings advice, do not reflect the new plan's approach. The state of knowledge about available emissions reductions has also changed, as reflected in the updated version of ENZ that the Government used in its modelling to develop the second emissions reduction plan. While the second emissions reduction plan is designed to meet the second emissions budget, and to contribute significant progress on emissions reductions after that, it does not put Aotearoa New Zealand on track to meet the third emissions budget. The third emissions reduction plan is not due until late 2029. The Government's modelling estimates the gap to meeting the third emissions budget to be around 9 MtCO<sub>2</sub>e over 2031–2035.<sup>18</sup>

This year, the Commission must recommend NZ ETS settings for the same years as covered by the second (2026–2030) emissions budget, but the Act requires our recommended settings to be consistent not only with the second emissions budget but also the third emissions budget, nationally determined contributions (NDCs) under the Paris Agreement, and the 2050 target.

As discussed in *Part 3: Te herenga utu – Unit limits*, we propose to align the NZ ETS settings with the domestic component of the first NDC, which is consistent with the level of the second emissions budget. The second NDC is closely aligned to the third emissions budget. Despite not meeting the third emissions budget, the Government's analysis for the second emissions reduction plan projects that Aotearoa New Zealand will achieve and sustain its 2050 target. Therefore, the key challenge for our analysis on the price control settings this year is assessing whether the current settings are consistent with the third emissions budget (and therefore with the second NDC), and if not, how they might need to change to be brought into alignment.

# **Cost containment reserve**

The cost containment reserve (CCR) is a supply of NZUs that only become available for sale if the auction clearing price meets or exceeds a specified trigger price.

The trigger prices for the CCR currently in regulations for 2025–2029 are set out in **Table 4.2.** The table also shows the value for 2030 that would result from continuing the same trajectory, an annual increase of 3% plus inflation. The trigger prices are in line with the Commission's previous advice on the CCR during the years 2022–2024. The trigger prices are also shown in 2024 dollars, to enable comparison with today's prices, and with modelling results. Other prices in this chapter are also given in 2024 dollars, unless otherwise specified.

In regulations	.2025	.2026	_2027	2028	2029	2030
Cost containment reserve tier 1	\$193	\$203	\$213	\$224	\$235	\$247
Cost containment reserve tier 2	\$242	\$254	\$267	\$280	\$294	\$309
In 2024 dollars						
Cost containment reserve tier 1	\$190	\$195	\$201	\$207	\$213	\$219
Cost containment reserve tier 2	\$238	\$244	\$252	\$259	\$267	\$274

Table 4.2: The current CCR trigger prices in regulations, and in 2024 dollars

In this section we set out our analysis of whether the current CCR setting in regulations remains appropriate in light of the second emissions reduction plan. First, we consider whether the CCR price trigger levels are consistent with the range of NZU prices potentially needed to meet the second and third emissions budgets, then our assessment of the unit volumes in the reserve.

### The CCR price triggers are consistent with the second emissions budget

The key role the NZ ETS needs to play over the period of the regulations (2026–2030) is to encourage further gross emissions reductions. This is because by 2026, there will not be time for further afforestation to make a material contribution to meeting the second emissions budget, as it takes around four years for a newly planted forest to become a carbon sink.

The CCR needs to align with the upper bounds of the range of NZU prices compatible with delivering the gross emissions reductions needed to meet the second emissions budget. There are several sources of evidence indicating that in Aotearoa New Zealand significant gross emissions reductions are economic at prices below \$200 per tonne of CO<sub>2</sub>e, roughly the location of the first tier of CCR trigger prices.<sup>xxxi</sup>

To add to this, the Government modelling looking at whether the second emissions reduction plan is sufficient generated some information about the NZU prices potentially needed to meet the second emissions budget. This used a combination of the Ministry for the Environment's NZ ETS market model and the ENZ model. Based on second emissions reduction plan policies and assumptions, as well as current NZ ETS settings, the modelling projected that the second emissions budget could be met with an NZU price path rising to \$92.60 in 2030, in 2023 dollars (\$95.66 in 2024 dollars).<sup>19</sup>

This provides assurance that the current CCR trigger prices are still consistent with what is needed for the second emissions budget. The modelled 2030 NZU price is comfortably below the first trigger price applying in that year (\$219). There is substantial headroom, of over \$120, for the price to range higher if necessary. This is important, as it is unlikely that the future will play out exactly as assumed in the modelling. There are a range of factors that could vary to make a higher NZU price necessary – for example, if fossil fuel prices are lower than assumed, higher NZU prices would be needed to achieve the same outcome, all else being equal.

# NZU prices needed to meet the third emissions budget are highly uncertain

Looking further ahead to assess what CCR price trigger levels are compatible with meeting the third emissions budget is more challenging. We approached this by examining:

 how high NZU prices might need to be to meet the third emissions budget via gross emissions reductions

<sup>&</sup>lt;sup>xxxi</sup> For example, EECA's Regional Energy Transition Accelerator research; the Commission's previous modelling in 2021–2022 to inform the setting of the first, second and third emissions budgets and the NZ ETS price control settings; and the analysis of marginal abatement cost curves by MfE in 2020.

- how high NZU prices might need to be to meet the third emissions budget via further afforestation, before 2031
- uncertainties around how Government policy may evolve over time.

# Significantly higher NZU prices are likely needed to reduce gross emissions to meet the third emissions budget

Reducing gross emissions will be the only option available to meet the third emissions budget, if the Government's latest emissions projections play out in reality. In other words, if by 2031 emissions are still projected to be above the budget level, it will be too late for further afforestation to assist due to the lag between planting and new forests delivering material sequestration. In this case, the CCR would need to be high enough to allow for NZU prices that can drive decarbonisation.

To develop evidence on this issue, we worked with Concept Consulting who modelled scenarios with the ENZ model to generate the shadow prices to meet the third emissions budget through gross emissions reductions. The scenarios were based on the second emissions reduction plan policies and assumptions. We varied different parameters to test the effects of uncertain factors such as baseline activity, the costs of reducing emissions, and Government policies affecting NZ ETS sectors. More detail on the modelling can be found in *Technical Annex 2: Price control settings*.

The shadow prices generated by ENZ can shed light on the NZU prices required. We note, however, that this type of modelling does not incorporate the dynamics present in the NZ ETS market. That is to say, the shadow prices from these scenarios give an indication of the NZU prices needed, but no indication of whether the NZ ETS can, or will, deliver these prices.

#### Testing policy uncertainty

To explore policy uncertainty, we modelled scenarios which varied the assumed supply of electric vehicles (EVs). This assumption represents constraints on EV supply chains and imports, that is, the constraint on the amount of EVs entering the country so that they are available to New Zealanders for purchase. The more constrained the EV supply, the lower the rate at which EVs will replace higher emitting vehicles. This would lead to higher transport emissions, requiring the NZ ETS to drive greater reductions from other sectors.

We chose this factor to vary as a proxy to represent policy uncertainty. Reasons for this include that transport is a key sector where emissions are likely to be material to whether the third emissions budget is met. EV uptake rates will be an important determinant of transport emissions for that period, and different uptake rates are expected to have a large effect on the emissions price needed in the NZ ETS to drive emissions reductions in other, non-transport sectors (such as industrial heat). In addition, the EV market is thought to be relatively unresponsive to price signals from the NZ ETS, but there is uncertainty about this. It is also an area where complementary policy, beyond what is included in the second emissions reduction plan, has clear potential to deliver further emissions reductions – which are unlikely to occur through emissions pricing alone.

Finally, the second emissions reduction plan set out clearly that the Government's policy approach is to focus on the NZ ETS as the main tool to reduce emissions. As relatively few complementary policies are expected to be implemented as part of the plan, we took a more limited approach to testing the impact of such policies.

We modelled high, central and low EV constraint scenarios. The two scenarios relevant for informing the CCR are those with the high and central EV constraints, as these are the scenarios that give the high- and mid-range emissions prices. These resulted in modelled shadow prices of \$350 and \$250 in 2035 respectively. The results are displayed in **Figure 4.1**.

These results indicate that the current CCR levels may not be high enough. In particular, the central scenario's price path is very close to the lower tier of the CCR, and the high EV constraint gives a price path above the top tier of the CCR.



**Figure 4.1:** ENZ modelled shadow emissions prices needed to reduce gross emissions to the levels required by the third emissions budget, under different EV constraints

Source: Concept Consulting analysis

#### Testing uncertainties affecting baseline emissions

We also explored the impact of baseline emissions uncertainty, through scenarios varying baseline emissions assumptions – such as those about GDP, population growth, fossil fuel prices, battery costs and so on. The value of these scenarios was in the insights they gave about the key external uncertainties, mostly outside of the Government's control, that could affect the NZU prices needed to meet the third emissions budget.

The key insight from the development of these scenarios was that over the period to 2035, the modelled shadow price was most sensitive to fossil gas prices. High fossil gas prices significantly reduced the emissions price needed to meet the third emissions budget; conversely, low fossil gas prices increased it considerably. The other factors varied had more impact over the longer term, beyond 2035.

Recent material declines in fossil gas production and reserves saw high fossil gas prices through winter 2024. How the fossil gas price will develop is very uncertain, but it seems more likely over coming years that the prices could be higher rather than lower. This tempers our view of the relatively high shadow prices in the scenarios discussed above.

# More afforestation before 2031 would reduce NZU prices to meet the third emissions budget

It is also possible that the gap to meeting the third emissions budget could be closed through additional afforestation over the next few years. This could bring down the NZU prices needed, given the relatively low cost of further afforestation when compared with gross emissions reductions.

The Government's second emissions reduction plan assumes an average of around 35,000 hectares of exotic afforestation per year in the years leading up to the third emissions budget. It is, however, uncertain how much afforestation will occur. For example, the Government is exploring partnering with the private sector to plant trees on Crown-owned land, and the contribution this could provide is uncertain. Planting must occur before 2031 if it is to contribute to meeting the third emissions budget, as it takes four years for a new forest to become a carbon sink.

We undertook a desktop analysis of how additional forests could help meet the third emissions budget. This showed an additional 15,000 hectares of exotic forests planted per year over 2027–2031 would bridge the entire abatement gap, totalling an average of 50,000 hectares of afforestation each year. This is significant, but not outside the realms of possibility, as shown by afforestation rates of around 40,000–70,000 hectares per year over 2021–23.<sup>xxxii, 20</sup>

Relatively low NZU prices can drive exotic forest planting. The Government estimates the cost of generating a 10% return on investment from converting sheep and beef land to forestry is \$50 per tonne CO<sub>2</sub>, within a \$25-\$75 per tonne CO<sub>2</sub> range.<sup>21</sup> At the time of writing this report, spot NZUs were at around \$60 per unit, representing a tonne CO<sub>2</sub>e.

The NZU price is only one factor influencing afforestation rates and there are other factors that are likely to limit its effect on afforestation going forward. This was highlighted in feedback we heard through our engagement (see *Part 2: Te hanga me te haepapa o NZ ETS* – *Current state and role of the NZ ETS*) and discussed in the most recent *2023 Afforestation and Deforestation Intentions Survey Report.*<sup>22</sup>

The Government has also announced that it plans to implement restrictions by Land Use Capability (LUC) on land that can register into the NZ ETS for forestry.<sup>23</sup> This change is a response to concern among rural communities about the social and economic impacts of farm conversions to forestry. The policy aims to limit whole farm conversions, rather than afforestation overall. It is uncertain what the effect of this policy will be. Whether

<sup>&</sup>lt;sup>xxxii</sup> The afforestation rate for 2023 is a provisional estimate.

<sup>60</sup> He Pou a Rangi Climate Change Commission | Advice on NZ ETS unit limits and price control settings for 2026–2030

afforestation rates reach or exceed 35,000 hectare per annum may depend on the behaviour of those excluded from the LUC restrictions, and it is difficult to predict how these landowners will respond.<sup>xxxiii</sup>

In two to three years, it will be much clearer how afforestation is tracking, and how it might contribute to meeting the third emissions budget.

#### **Government policy will evolve**

There are also more difficult-to-quantify uncertainties related to policies. The second emissions reduction plan sets out the Government's current intentions. As the policies it contains are developed and implemented, they will evolve and their impacts may differ from expectations. In addition to forestry (as highlighted above), there are other areas where the impact of policies is uncertain, or where policy initiatives and reviews could lead to different outcomes than expected, for example, in the electricity sector.

The Act also sets out a framework for climate policies to be reviewed and updated over time, giving some waypoints for potential changes. The Government must set the fourth emissions budget by the end of 2025, and the second and third emissions budgets could be revised. The Commission will then need to take account of the new budget in its reconsideration of the price controls in either its 2026 or 2027 NZ ETS settings advice. The plan to meet the third emissions budget will also become clearer before its starts in 2031. The Commission must advise on the plan by late 2028, with the Government to publish it by the end of 2029.

# The current CCR price triggers remain appropriate for the time being

Our analysis indicates that there is a risk that the current CCR price levels are too low to allow the NZU prices that might be needed to meet the third emissions budget. However, there are large uncertainties around this, so it is not clear that the risk will materialise.

If higher than forecast forest planting between now and 2030 closes the gap to meeting the third emissions budget, the current CCR triggers and trajectory could remain appropriate into the future. If gross emissions reductions must fill the gap, the CCR may need to be increased.

The existing CCR trigger prices are not currently inhibiting the NZU price. They provide significant room for the market price to range higher to help meet the second emissions budget, and lay the foundations for meeting the third emissions budget.

We judge that it would be premature to increase the CCR price triggers now, when it is very uncertain that this will actually be needed. The risk that higher prices will be needed should be monitored, as further evidence and information is likely to come to light over the next two to three years to reduce the uncertainty about what is needed to meet the third

<sup>&</sup>lt;sup>xxxiii</sup> It has been announced that certain types of Māori land will be excluded from the restrictions, and farmers may also plant up to 25% of their land in forest and still register it into the NZ ETS irrespective of LUC.

emissions budget and second NDC. If adjustments are required to the price control settings, they can be made then – still well ahead of the beginning of the third emissions budget period.

We therefore recommend that the CCR price triggers be extended to 2030 along their existing trajectories and remain unchanged except for minor adjustments to reflect the latest inflation forecasts.<sup>xxxiv</sup> We have not identified any justification for amending the first two years of the settings, so the inflation adjustments would only apply from 2028 onwards.

CCR trigger prices	No chan	ges r	Updated ecommendation	IS	New
	2026	2027	2028	2029	2030
Tier 1	\$203	\$213	\$223	\$235	\$246
Tier 2	\$254	\$267	\$279	\$293	\$308

 Table 4.3: Recommended trigger prices for the CCR

This approach means that the recommended CCR trigger price levels may not align with meeting the third emissions budget and second NDC under all possible scenarios of the NZU prices that could be needed to meet them.

Nevertheless, we consider that there is a good likelihood that the proposed settings align with what is needed, and that having considered various relevant matters, the discrepancy is justified.<sup>xxxv</sup> In particular, we have considered:

- The forecast availability and costs of ways to reduce emissions. This included looking at how uncertainty in afforestation rates would affect the availability of net removals by forests over 2031–2035. This has flow-on effects for the costs of emissions reductions that may have to be incentivised by the NZ ETS in other sectors.
- The role of regulatory predictability in the proper functioning of the NZ ETS. We consider it important for the effectiveness of the scheme that the price settings are not changed unnecessarily, and if there is a need to do so, it should be signalled as far in advance as possible.

Another relevant matter we have considered is that the policies to meet the third emissions budget are evolving, with the third emissions reduction plan due in 2029.

<sup>&</sup>lt;sup>xxxiv</sup> The inflation adjustments applied use the Treasury's consumer price index (CPI) inflation forecasts contained in the Half Year Economic and Fiscal Update 2024.

<sup>&</sup>lt;sup>xxxv</sup> Our full reasoning about how our recommended price control settings contribute to fulfilling the accordance requirements of s30GC is laid out in *Technical Annex 3: Assessment of accordance*, published separately on our website.

# **Determining the CCR reserve volumes**

The existing CCR reserve volume is based on recommendations the Commission made in its first, 2022 advice on the NZ ETS settings. The total volume in the two tiers of the CCR was set to be equal to the total surplus reduction volume estimated in 2022.

This volume has not been adjusted as the surplus estimate has changed. The CCR's ability to contain prices, in the unlikely event that it is triggered, will be related to whether reserve volume is sufficient to satisfy participants' near-term surrender obligations and hedging needs. Fluctuations in the surplus have not been caused by increased unit demand, so it does not follow that they justify an increase to the reserve volume. We have also not seen other evidence to suggest that the existing volumes are inappropriate.

As in last year's advice, we see no compelling case to change the reserve volume. Retaining the existing volumes would support regulatory predictability, and would be consistent with our recommended continuation of the existing CCR price triggers.

		New			
Million NZUs	2026	2027	2028	2029	2030
Tier 1 volume	2.3	2.1	1.9	1.7	1.4
Tier 2 volume	4.2	3.8	3.4	3.0	2.5
Total CCR volume	6.5	5.9	5.3	4.7	3.9

Table 4.4: Recommended CCR reserve volumes

# **Auction reserve price**

The auction reserve price (ARP) is the price below which the Government will not sell units at auction.<sup>xxxvi</sup> The purpose of the ARP is to act as a safety valve that helps guard against NZU prices dropping below what is needed for meeting emissions budgets.

The ARP is not a hard price floor, as secondary market prices can fall below it. Instead, it supports price by preventing the Government from adding further NZUs into the market when prices are low.

The ARP levels currently in regulations for 2025–2029 are set out in **Table 4.5**, along with the value for extending them to 2030. They reflect the Commission's 2022 advice that the ARP be based on a price of \$70 in 2030 (in 2022 dollars), discounted at 3% a year and adjusted for inflation to avoid the levels being eroded in real terms. The ARP levels are also shown

<sup>&</sup>lt;sup>xxxvi</sup> The Government has also implemented a confidential reserve price, which prevents NZUs from being sold at auction at a price significantly below the secondary market price, to avoid unduly disrupting the secondary market. The confidential reserve price is not within the scope of this advice.

2024 dollars, to enable comparison with prices now and with modelling results. Unless otherwise stated, prices in this section are quoted in 2024 dollars.

Like the CCR, recent developments such as publication of the second emissions reduction plan, and declined auctions in 2024, mean the current ARP levels' consistency with emissions budgets needs to be re-assessed.

In regulations	2025	2026	2027	2028	2029	2030
Auction reserve price (ARP)	\$68	\$71	\$75	\$78	\$82	\$86
In 2024 dollars						
Auction reserve price (ARP)	\$67	\$68	\$71	\$72	\$74	\$77

 Table 4.5:
 The current ARP prices in regulations, and in 2024 dollars

We consider that determining the appropriate levels for the ARP over 2026–2030 should include examining the issues below.

- The minimum prices likely needed to meet the second emissions budget, including:
  - the cost of the emissions reductions to meet the second emissions budget,
  - why the ARP caused auctions to decline in 2024, and its role in supporting confidence in the market, and
  - whether the current ARP levels align with the Government's stated goal of maximising domestic emissions reductions and minimising the costs of achieving the first NDC.
- The minimum prices likely needed to meet the third emissions budget.

# The ARP aligns with the second emissions budget

#### The ARP for 2026–2030 needs to be based on the cost of reducing gross emissions

To meet the second emissions budget, actions must now focus on reducing gross emissions, so the ARP levels for 2026–2030 need to reflect the cost of gross reductions, rather than of forests. It is too late for planting more forests to assist, due to the four-year lag after planting before a new forest starts sequestering carbon.

There is a range of evidence pointing to prices around or above the current ARP levels (\$68 this year) being needed to support gross reductions. A recent example is a 2024 EECA study that examined costs to decarbonise process heat in the South Island.<sup>24</sup> This found that 75% of the abatement would require an emissions price greater than \$75 to be economic.

The Government's second emissions reduction plan modelling also supports the current ARP. This modelled meeting the second emissions budget with a price path above the ARP levels, with an NZU price in 2030 of around \$96.

#### **Declined auctions in 2024**

When the price controls have effect, it is relevant to consider the cause, and whether this suggests they are set at an incorrect level. The ARP caused auctions to decline in 2024. The 2024 March and December auctions only partially cleared, and the June and September auctions declined fully as no bids were received at or above the 2024 ARP level (\$64).

As highlighted in *Part 2: Te hanga me te haepapa o NZ ETS – Current state and role of the NZ ETS*, this occurred after a period of volatile secondary market prices and policy uncertainty over 2022–2024 which negatively affected sentiment. The Government's May 2024 NZ ETS settings consultation document compounded this by mentioning the possibility of lowering the ARP, with no rationale for why it might consider doing so. NZU prices immediately dropped, followed by the two declined auctions. Prices only started to materially recover after the Government announced in August that it was not changing the ARP.

We consider the ARP having had effect in 2024 to be the ARP working as intended, not an indication that it is set at an inappropriately high level. The ARP having had effect is simply the ARP playing its role to manage the uncertainty and risk of exceeding budgets by preventing the Government from selling units at low prices inconsistent with meeting those budgets.

#### The ARP's role in supporting market and investor confidence

For the NZ ETS to help meet the second emissions budget, investors need sufficient confidence in the scheme emissions price to invest in reducing emissions. The ARP supports this confidence by signalling the lower bounds of the emissions price that can be expected, reducing downside risks to investment in both decarbonisation and forestry.

The market is highly responsive to Government signals about the ARP. The 19% fall in NZU prices after the 2024 NZ ETS settings consultation discussed lowering the ARP shows this.<sup>xxxvii</sup> Respondents to the consultation also mostly opposed lowering the ARP, seeing it as destabilising the market and increasing uncertainty.

This indicates that retaining current ARP levels is critical to rebuilding confidence and the effectiveness of the NZ ETS. This is likely to support the Government's stated intent to continue restoring credibility to the NZ ETS. Retaining current ARP levels also helps send a clear and stable investment signal, supporting recent and potential upcoming investments to reduce emissions.

#### Achieving the first NDC domestically as much as possible

Another relevant consideration for the ARP is the prices at which the Government could need to purchase offshore mitigation to meet the first NDC. As discussed in *Part 3: Te herenga utu* – *Unit limits,* the Government's emissions projections show 84–89 MtCO<sub>2</sub>e offshore mitigation may be needed to meet the first NDC. The Government's official

<sup>&</sup>lt;sup>xxxvii</sup> The Government consultation began on 15 May 2024, the 19% change in price occurred over 15–29 May according to data from <u>https://github.com/theecanmole/nzu/blob/master/spotprices.csv</u>

communications and statements continue to affirm that it is seeking offshore mitigation to meet the first NDC.

If the Government sold NZUs into the NZ ETS at prices below the cost of offshore mitigation, it would incur direct fiscal costs by allowing emitters to emit more cheaply than the costs involved in meeting its international emissions reduction target. The Government has also set out that it wants to achieve the first NDC through domestic emissions reductions as much as possible and minimise the use of offshore mitigation.

The cost of offshore mitigation is uncertain. Limited information is available from estimates published by countries seeking offshore mitigation to meet their 2030 NDCs, set out in **Table 4.6**. The estimates range from around \$30 to \$100.

Country	Source	Cost per tonne CO₂e (NZ\$)
New Zealand	Climate Economic and Fiscal Assessment <sup>25</sup>	<ul> <li>This estimated three price ranges, but we consider only two are credible:<sup>xxxviii</sup></li> <li>\$38-43, based on mitigation costs in developing</li> </ul>
Assessment	<ul> <li>economies.</li> <li>\$89–102, based on average prices across comparable established ETS.</li> </ul>	
Switzerland	2023 annual report of the Klik Foundation, an entity tasked by the Government to obtain offshore mitigation. <sup>26</sup>	<ul> <li>Klik reported an average cost of \$51 for the limited volume of purchases so far.</li> <li>It expects a likely cost of \$78 on average for future purchases to meet Switzerland's 2030 NDC.</li> </ul>
Singapore	Reported results of a Government Request for Proposals, February 2025. <sup>27</sup>	• NZ\$32–\$72.

Table 4.6: Estimates of the cost of offshore mitigation

Commentary on how the market for offshore mitigation may develop suggests that its cost will increase over time.<sup>28</sup> The low-end costs quoted for Switzerland and Singapore may reflect first mover advantage, a position Aotearoa New Zealand is unlikely to share.

We consider that the offshore mitigation cost estimates support maintaining, or potentially increasing, the current ARP, which sits around the middle of the range. If the ARP were to be

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<sup>&</sup>lt;sup>xxxviii</sup> The third was very high and based on carbon prices in advanced economies in a global high emissions scenario, which does not correspond to offshore mitigation sources that would make economic sense for Aotearoa New Zealand to draw on.

moved towards the lower end of cost estimates, it would likely create a high risk of the Government increasing the cost of meeting the NDC.

### How the ARP should evolve in the 2030s is less clear

The ENZ modelling described earlier in this chapter provides insight into the minimum emissions prices that may be needed to meet the third emissions budget. The low EV constraint scenario, which is most relevant for the ARP, gave a shadow price of \$188 in 2035; once discounted back to 2026–2030, this is well above current ARP levels. This suggests that if further action to achieve the third emissions budget must involve gross emissions reductions, there could be a case to increase the ARP levels.

Our view of this result is moderated, however, by the analysis looking at baseline emissions assumptions. This highlighted that a high fossil gas price could significantly reduce the emissions price needed to achieve the third emissions budget. Afforestation before 2031 over the 35,000 hectares per year assumed in the Government's emissions projections could also close some of the gap and reduce the emissions prices needed.

If planting forests is increasingly relied on to meet targets in future, after 2030 the emissions price may not need to continue an upward trajectory. The emissions price could tend towards the marginal cost of afforestation – around \$50 in a range of \$25–75, according to the Government. This could mean there is a case to flatten out the ARP levels in the 2030s, rather than continue its 3% annual increase in real terms. However, since the current trajectory is still required to accord with the second emissions budget, we see no case to do this now. This is therefore an issue for settings to be decided in future that apply to years in the 2030s, not the 2026–2030 period covered by the settings in this advice.

### The current ARP remains appropriate and should not be lowered

We recommend extending the current ARP to 2030, as it is set at the right level for the 2026–2030 period, aligning with the low end of costs to reduce gross emissions. Looking out to 2035, the picture is less clear, but if change is needed, it could be implemented later.

Based on current evidence, we do not see any case for lowering the ARP, either now or in the 2030s. In the period to 2030, doing so would likely create a high risk of the Government increasing the cost of meeting the first NDC. While it may seem consistent with a low-cost, forestry-led approach to meeting targets, gross emissions reductions are clearly needed for meeting the second emissions budget – and it is highly likely that at least some will be needed to meet the third emissions budget. Lowering the ARP would undermine existing decarbonisation and forestry investments, as it is likely that the current ARP was a factor in those investment decisions, and future investments in reducing emissions.

In any event, by the 2030s the ARP is likely to have less influence on the market. As the NZ ETS emissions cap declines towards zero, the auction volumes will also decline to become a smaller share of unit supply, with forestry likely to increasingly dominate the market.

#### Table 4.7: Recommended auction reserve prices

Auction reserve price	No changes		Updated fo	New	
	2026	2027	2028	2029	2030
Auction reserve price	\$71	\$75	\$78	\$82	\$86

The evidence suggesting that in some scenarios of the future the ARP might need to be higher means that at this time, we are unable to say that our recommended ARP levels align to a high degree with meeting the third emissions budget and second NDC. Nevertheless, we consider that there is a good likelihood that the proposed settings align with what is needed, and that taking this approach is justified, having considered various relevant matters.<sup>xxxix</sup>

In particular, we have considered:

- The forecast availability and costs of ways to reduce emissions. There is large uncertainty about the costs of abatement that may be applicable when looking 10 years into the future, when assessing what emissions reductions will be needed to meet the third emissions budget and second NDC.
- The important role of the ARP in supporting confidence to invest, as well as of regulatory predictability, which are part of the effective and proper functioning of the NZ ETS.

Another relevant matter we have considered is that the policies to meet the third emissions budget are evolving, with the third emissions reduction plan due in 2029.

# Desirable emissions price path

The Act states that the Commission must recommend limits and price control settings for units, including "any desirable emissions price path".xl

In previous years, we have concluded that uncertainty about the context and NZ ETS policy means that we have not been able to define such a path. Our position this year remains the same, particularly given the uncertainty around the emissions prices needed to meet the third emissions budget.

# Impacts of emissions prices on households and the economy

Modelling shows that Aotearoa New Zealand's economy would continue to grow under the emissions budgets. In many cases, low emissions investments made now will more than pay for themselves in the medium to long term. In addition, the health benefits could be up to \$2.1 billion a year, due to cleaner air from less fossil fuels being burned for transport.<sup>29</sup>

<sup>&</sup>lt;sup>xxxix</sup> Our full reasoning about how our recommended price control settings contribute to fulfilling the accordance requirements of s30GC is laid out in *Technical Annex 3: Assessment of accordance*, published separately on our website.

<sup>&</sup>lt;sup>xl</sup> Section 5ZOA(2) of the Act

<sup>68</sup> He Pou a Rangi Climate Change Commission | Advice on NZ ETS unit limits and price control settings for 2026–2030

The Government has identified the NZ ETS as the primary mechanism to incentivise the changes and investments needed to meet emissions budgets. To do this, it must incentivise more efficient choices by changing the relative prices of emissions-intensive activities, products and services.

Over time, changes such as improved building quality, declining cost of electric vehicle ownership, and energy efficiency improvements will also mean that households and businesses are increasingly less exposed to the emissions price.

In certain instances, particularly in the short term, households and businesses will not have the options available to be able to respond to the change in relative prices, and so will pay the full cost that is passed onto them.

However, we assess that lowering the price control settings to reduce the flow-on impacts of emissions prices would counteract the NZ ETS's ability to drive change.

Modelling shows that any sustained cost would be modest in comparison to other drivers of inflation.<sup>30</sup> It also shows that the Government has options to mitigate any regressive effects through existing transfer mechanisms.<sup>31</sup> Targeted Government policies outside the NZ ETS can also remove barriers to transition – for example, providing support for the upfront costs of electrification.

In the second emissions reduction plan the Government described its approach to addressing the impact of climate policies on households, business, iwi/Māori and across regions, focusing on:

- reducing income taxes
- support for retraining
- targeted support for iwi/Māori particularly Māori agribusiness
- targeted sector support to limit the impacts on the agriculture sector.

Under targeted sector support, the Government included delaying the entry of agriculture into the NZ ETS and supporting on-farm mitigation tools and technologies. A change to NZ ETS rules to limit conversion of whole farms into forest is also set out, but otherwise this approach does not affect the sectors that remain within scope of the NZ ETS.

### Impacts on iwi/Māori

In our 2023 Advice on the direction of policy for the Government's second emissions reduction plan, we recommended the Government use targeted policies to promote equity and in setting those policies to also include the impacts of climate change and adaptation, as well as mitigation.<sup>32</sup>

The Commission has also emphasised that it is important the Government ensure a fair and equitable transition for and with iwi/Māori. This includes acknowledging the Crown's responsibilities under Te Tiriti o Waitangi/The Treaty of Waitangi and the necessity of agency under iwi/Māori leadership.

Iwi/Māori communities and entities have varied priorities and aspirations, and a range of different interests relating to the NZ ETS.

Iwi/Māori account for a larger share of employment in emissions-intensive industries. In addition, many iwi/Māori face resource challenges that may generate further inequities and affect their ability to participate in an equitable transition to a low emissions economy.
Iwi/Māori own a significant proportion of primary sector assets and face historic barriers that make updating those assets to facilitate lower emissions activities highly challenging.

A recent analysis from BERL on the Māori economy showed that the Māori asset base is diversifying beyond the primary sectors.<sup>33</sup> It reported that between 2018 and 2023 professional and technical services, and real estate and property, collectively generated 39% of the growth in Māori assets over the period, more than the share from agriculture, forestry and fishing (29%). Diversification into lower emitting activities such as these may reduce the impact of the transition on iwi/Māori.

Iwi/Māori have considerable interests in existing forests registered in the NZ ETS. Some of this is Māori operated commercial forestry and some is non-Māori operated forestry on whenua Māori land managed by trusts. As discussed in the section on engagement in *Part 2* of this advice, there are diverse views and practices around managing NZUs received and interactions with the NZ ETS. It is important to ensure approaches to understanding such interests are built alongside iwi/Māori and appreciative of diversity.

Forestry is a large part of the Māori economy, so any Government decisions on operating the NZ ETS or reforming its structure can impact on different hapū and iwi around Aotearoa and would require consistent consideration of Te Tiriti o Waitangi/The Treaty of Waitangi and Treaty principles. The Government's announcements on plans to restrict the registration into the NZ ETS of new forests on certain land-use classes is an example of a proposed policy that has the potential to disproportionately affect iwi/Māori. The Government has said the policy will exclude certain categories of Māori-owned land, in line with Treaty obligations.

In *Part 2* of this advice we highlighted perspectives on the NZ ETS that we have heard from iwi/Māori, including the concern that aspects of the NZ ETS have inequitable impacts on Māori.

### Impacts on businesses and industries

For emissions-intensive and trade-exposed (EITE) businesses and industries, emissions leakage risk – the possibility that a rising emissions price could cause some production to shift overseas in a way that increases global emissions – is currently being managed through industrial free allocation. This substantially reduces the cost of the NZ ETS for these businesses and therefore the risk of economic slowdown and regional employment impacts.

The effect of emissions pricing will be more manageable for less emissions-intensive businesses who have more ability to pass on increased costs, and the NZ ETS may enable more opportunities for these and other (new) low emissions businesses.

In the medium to long term, the NZ ETS will help drive more efficient and competitive businesses. Internationally, there are growing expectations from investors, customers and consumers around disclosing emissions and taking climate action through the value-chain. To remain competitive, Aotearoa New Zealand's businesses will need to act on their emissions and the NZ ETS incentive can support them to make the shift.

#### Impacts on sectors and regions

The impacts of the NZ ETS price on different sectors and regions are influenced by the makeup of the local economy and workforce. It is important that the Government ensures the outcomes of these impacts are not inequitable.

Some regions have a higher concentration of emissions-intensive industries, particularly Southland, Taranaki and the West Coast. In contrast, employment in more urban areas is often concentrated around lower emissions intensity service sectors.

Some regions, such as Tairāwhiti, have significant areas of forest, much of which is voluntarily registered into the NZ ETS, augmenting income from forestry activities.

Increases to the NZ ETS emissions price over recent years have played a role in increases to forest planting rates across the country, with land conversions more concentrated in some regions. This has impacts for people and regions affected by land-use change, particularly rural communities that thrive on a diversity of land uses.

We have heard concerns that land-use change to forestry could reduce employment in rural communities.<sup>34</sup> The second emissions reduction plan set out the Government's intended policies to reduce the distributional impacts of land-use change. These included limiting registrations into the NZ ETS of farms converted to forests. The effects of this policy remain somewhat unclear, as it is still under development.

# PART 5: Te taupoki – Final recommendations

	No changes		Upda	New	
Million units	2026	2027	2028	2029	2030
Limit on New Zealand Units available by auction ( <i>including CCR volume</i> )	11.7	10.2	12.3	11.7	10.9
Limit on the approved overseas units used	0.0	0.0	0.0	0.0	0.0
Overall limit on units	17.4	15.9	16.9	16.2	14.9

# **Recommended limits and price control settings**

	No changes		Updated		New
Cost containment reserve	2026	2027	2028	2029	2030
Tier 1					
Trigger price	\$203	\$213	\$223	\$235	\$246
Reserve volume (million units)	2.3	2.1	1.9	1.7	1.4
Tier 2					
Trigger price	\$254	\$267	\$279	\$293	\$308
Reserve volume (million units)	4.2	3.8	3.4	3.0	2.5

	No cha	anges	Upda	ted	New
Auction reserve price	2026	2027	2028	2029	2030
Auction reserve price	\$71	\$75	\$78	\$82	\$86

# Tāpiritanga – Appendix

# Appendix A: Summary of how legislative requirements and considerations under the Act have been addressed

Under the Climate Change Response Act 2002, in relation to He Pou a Rangi Climate Change Commission's annual recommendations about NZ ETS unit limits and price control settings, the Commission has three principal obligations.

The recommendations must:

- a. cover the limits and price control settings for each year that the Minister must cover
- b. be made in accordance with:
  - i. the requirements of sections 30GB and 30GC (except for s30GC(5)(e)) that apply to the making of the Minister's recommendations
  - ii. the Commission's other duties, for example:
    - to consider, where they are relevant, the matters set out in s5M of the Act
    - 2. to proactively engage and provide for public consultation where necessary (s5N)
    - 3. to act independently (s5O)
    - 4. to act in a manner consistent with the purpose of the Act (s3).
- c. be given to the Minister a reasonable time before the Minister is required to recommend the making of regulations.

**Table A.1** describes the legal obligations on the Commission and where in this report they are addressed.

*Technical Annex 3: Assessment of accordance*, published separately on our website, provides further information about how our advice meets the requirements in s30GC of the Act.

#### **Table A.1:** Statutory requirements for our advice

Obligations in the Act	Where addressed		
Section 3: Purpose <sup>xli</sup>			
<ul> <li>(1)(aa) provide a framework by which New Zealand can develop and implement clear and stable climate policies that –</li> <li>(i) contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5°C above pre-industrial levels;</li> </ul>	The Act's purpose has been considered in all our analysis. Particularly through analysis of how to accord the settings with emissions budgets, the 2050 target and the NDC. See step 1 of the unit limits.		
(1)(b) provide for the implementation, operation, and administration of a greenhouse gas emissions trading scheme in New Zealand that supports and encourages global efforts to reduce the emission of greenhouse gases by –			
i) assisting New Zealand to meet its international obligations under the Convention, the Protocol, and the Paris Agreement; and			
ii) assisting New Zealand to meet its 2050 target and emissions budgets:			
Section 30GC: Requirements for regulations about limits and price control settings for units			
(5)(a) Projected trends in greenhouse gas emissions, including both emissions covered by the NZ ETS and those that are not covered	We consider projected trends of greenhouse gas emissions throughout our analysis in steps 1, 2, 3 and 4 of the unit limits method. We also considered projected trends in greenhouse gas emissions in considering what actions and NZU prices may be needed to meet future emissions targets in advising on the price control settings.		
(5)(b) The proper functioning of the NZ ETS	We have considered the proper functioning of the NZ ETS in each of the judgements and new approaches described in the body of the paper, particularly in considering the importance of regulatory predictability.		
(5)(c) International climate change obligations, instruments or contracts New Zealand may have for accessing offshore	We have taken this into account for step 1 (accord unit limits with emissions budgets, NDC and 2050 target) and step 6 (set		

x<sup>li</sup> The Act's purpose (s3) also contains other elements such as adaptation and international reporting requirements which are not relevant to the scope of this advice and so are not addressed.

mitigation from other carbon markets	approved overseas unit limits) of the unit limit method. We have also considered the potential cost of offshore mitigation in the assessment of the price control settings.	
(5)(d) The forecast availability and costs of ways to reduce greenhouse gas emissions, that may be needed for New Zealand to meet its emissions reduction targets	This is taken into account in steps 1 and 2 of the unit limits. It is also considered in our assessment of the NZU prices needed to meet emissions reduction targets in the price control settings	
(6) In respect of the price control settings:		
(a) the impact of emissions prices on households and the economy	We considered the impact of emissions prices on households and the economy in making our recommendations on the price control settings. Our analysis on the impacts of emissions prices is included in Part 4 of this advice.	
(b) the level and trajectory of international emissions prices	We have considered the cost of offshore mitigation, including how it may change over time, in our assessment of the appropriate price level for the ARP. We have also reviewed information on current and future possible international emissions prices. We consider that the recommended price control settings are still within the range of forecast international emissions prices and comparable to the efforts of developed country peers, rather than falling behind or overtaking them.	
(c) inflation	Inflation is considered in our advice on the price control settings. The consideration of inflation is relevant in two ways: whether and how to adjust the price control settings for inflation, and also the potential impact of emissions prices on inflation. Our conclusions on inflation are set out in Part 4 of this advice.	
Section 5ZOA: Recommendations about limits and price control settings for units		
S5ZOA is the empowering legislation that requires the Commission to provide this advice.		
Section 5M: Matters the Commission must consider, where relevant		
(a) Current available scientific knowledge	This is accounted for through the requirement	

step 1 of the unit limits. It is also considered in price control settings in the assessment of	a) Current available scientific knowledge	This is accounted for through the requirement
step 1 of the unit limits. It is also considered in price control settings in the assessment of ways emissions budgets could be met, and the		to accord settings with emissions budgets,
price control settings in the assessment of ways emissions budgets could be met, and the		NDCs, and the 2050 target, and is addressed in
ways emissions budgets could be met, and the		step 1 of the unit limits. It is also considered in
, 3		price control settings in the assessment of
costs of different approaches.		ways emissions budgets could be met, and the
		costs of different approaches.

(b) Existing technology and anticipated technological developments, including the costs and benefits of early adoption of these in New Zealand	This is considered in step 2 of the unit limits, and in the price control settings in the assessment of NZU prices that may be needed to meet emissions reduction targets.
(c) Likely economic effects	Our analysis takes this matter into consideration through step 1 and step 2 of the unit limits method, as well as in the analysis of impacts of emissions prices on households and the economy for considering the price control settings.
(d) Social, cultural, environmental, and ecological circumstances, including differences between sectors and regions	Our analysis takes this matter into consideration through step 1 and step 2 of the unit limits method, as well as in price control settings through the analysis of impacts of emissions prices.
(e) Distribution of benefits, costs, and risks between generations	For this advice, we have considered this through the way we have reflected the Government's second emissions reduction plan in our settings advice, recognising that the Government was required to consider these matters in setting emissions budgets and the emissions reduction plan, and that we consider that the Commission's advice on the NZ ETS settings needs to be compatible with the Government's wider climate policy package.
(f) The Crown–Māori relationship, te ao Māori, and specific effects on Iwi/Māori	This is considered in step 5 of the unit limits, particularly in relation to the availability to the market of pre-1990 forestry units, and in our advice on the price control settings. Part 4 of this advice includes specific information related to the impacts of the NZ ETS on iwi/Māori that relates to this consideration.
(g) Responses to climate change taken or planned by parties to the Paris Agreement or to the Convention	Our analysis considered this through the section 30GC 6(b) consideration of international emissions prices noted earlier in this table. We have also considered this in how the NZ ETS settings demonstrate accordance with the first NDC in step 1 of the unit limits, and in the price control settings in considering the auction reserve price.
Section 5N: Consultation	
(1) In performing its functions and duties and exercising its powers under this Act, the Commission must—	In developing this advice on NZ ETS unit limits and price control settings, we considered whether it was necessary to provide for public consultation on this advice, and decided that it

(a) proactively engage with persons the Commission considers relevant to the functions, duties, and powers; and

(b) where the Commission considers it is necessary, provide for participation by the public. was not. *Part 2* of this advice describes the proactive engagement we undertook to meet the requirement in s5N(1)(a).

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