

Alt-F/Tautuhi anō: Te mātai i ngā kaikōkiri o te ngahere i Aotearoa

Tuhinga Whakarāpopoto

Āpereira 2025



Parliamentary Commissioner for the Environment
Te Kaitiaki Taiao a Te Whare Pāremata

Ka taea tēnei tuhinga te tārua ina whakaatuhia te mātāpuna. E wātea ana tēnei pūrongo me ētahi atu tānga hoki nā Te Kaitiaki Taiao a Te Whare Pāremata ki pce.parliament.nz.

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Ngā ihirangi

Ngā ngahere i Aotearoa	6
He aha te ngahere?	7
He aha te āhua o ō tātou ngahere ināianei?	8
Ngā ngahere taketake	8
Ngahere whakatiputipu tauhou	8
Ngāi Māori me te ngahere	9
E ahu ana tātou ki hea?	10
Te whakaputa rākau papa	10
Te NZ ETS	10
Ngā pāpātanga o te panoni āhuarangi	10
Ka tipu ngā ngahere ki hea ā muri ake nei?	11
He aha ngā ara kē?	12
Ngā ngahere taketake hou	12
Te ngahere whakawhiti	13
Ngā ngahere tauhou kē	14
Ko ngā kaupapa whakahaere kē	15
He aha ngā tauārai ki te ngahere kē?	16
Te NZ ETS	16
Te waeture	16
Te ohaoha	17
Te wāteatanga o ngā mōhiohio me te rangahau	17
Ngā tauārai kei te aroaro o ngāi Māori	18
Ngā tūtohu	19

Ngā ngahere i Aotearoa

E rua ngā tūmomo ngahere matua i Aotearoa: ngā ngahere taketake e tiakina ana mō ngā uara ā-taiao, ā-ahurea, ā-whāomoomo hoki; me ngā ngahere arumoni, e tiakina ana mō te papa rākau, te weu, me (e piki ake haere ana tēnei āhuatanga) te whakaputu waro. E whakatuānuitia ana ngā ngahere arumoni e ngā ngahere whakatiputipu paina.

Mai i te tīmatanga o ngā ngahere arumoni, kua ākina te tuangahere (te unuhanga ngahere), te whakatō anō i ngā ngahere (te whakatō i ngā ngahere o mua), me te whakatō i ngā ngahere hou e ngā tohu o te taiahumoni wā poto me te whakarite. Inakuanei, he poapoa hou mō te whakatō i ngā ngahere hou i puta i te mahi mā ngā ngahere mō te whakaputu waro.

Ko te tikanga o te ahunga onāiane i Aotearoa ki te whakamauru āhuarangi, hei ngā tau 25 e tū mai nei, neke atu i te 900,000 heketea o ngā ngahere hou ka whakatōngia pea puta noa i te horanuku.¹ Ahakoa e hiahiatia ana e te nuinga o ngā tāngata nō Aotearoa hei ngahere taketake te nuinga, he nui ake te tūponotanga i raro i ngā kaikōkiri ā-oaha, ā-kaupapahere hoki onāiane, pērā i te New Zealand Emissions Trading Scheme (NZ ETS, hei ngahere paina anō kē ēnei (*Pinus radiata*)).

Ko te whāinga o tēnei pūrongo hei tautoko i ngā kōrerorero mō te whakatō i ngā ngahere hou ā muri ake nei i Aotearoa. Ko te pātai e ahu ana tātou ki hea, ā, he aha ētahi o ngā kaupapa kē pea. Otirā, ka whai whakaaro ki:

- Ngā mea e kōkiri ana i te whakatō i ngā ngahere hou i Aotearoa, ā, he aha te whakaaweawe ki tō tātou taiao?
- E mōhio ana tātou ki te aha e pā ana ki te whakatū i ngā ngahere taketake kia tino rahi?
- He aha ētahi o ngā tūmomo rākau tauhou kē e taea ai te whakatū ki Aotearoa? He aha e mōhio ana e pā ana ki ēnei?
- E mōhio ana tātou ki te aha e pā ana ki te whakahaere o ētahi tūmomo ngahere, ā, he aha ngā pūnaha whakahaere e taea ana i tua atu i te tope i ngā rākau katoa?
- He aha ētahi o ngā pāpātanga ā-taiao e puta mai pea i te whānui haere o ngā pūnaha ngahere kē (arā, he rerekē i te paina i raro i te topenga o ngā rākau katoa, te kaupapa ngahere waro rānei)?
- He aha e aukati ana i te piki ake o ngā pūnaha ngahere kē?

Kāore e kore, he wāhi hira tā te radiata pine ki te oaha o Aotearoa, ā, me pērā ka tika. Kia whakatōngia ki te wāhi tika (kia whakahaeretia tikahia hoki), he rauemi uara nui me ngā painga maha. Heoi anō, e puta ai ētahi whakamōrea ā-taiao, ā-oaha hoki i tā mātou tino whakawhirinaki ki te momo rākau kotahi ināiane. Mā aua whakamōrea e whakamōrea ai te manawaroa o tō tātou ngahere. I ētahi wā, he nui rawa ngā whakaaweawe taiao o te kaupapa tope i ngā rākau katoa, ā, kāore e taea te parahau. He nui ake ngā whakamōrea o ngā ngahere hei whakataurite i ngā putanga mātātoka. E whakatewhatewha ana hoki tēnei pūrongo i ngā panoni matawhānui e hiahiatia ana kia urupare i ngā take o tā mātou ahunga ki te ngahere ināiane.

¹ He Pou a Rangī, 2024. Advice on Aotearoa New Zealand's fourth emissions budget. Tūtohi 4.2.

He aha te ngahere?

He rerekē te whakamāramatanga o te kupu 'ngahere'. I roto i te pūrongo nei, e whakamahia whānuitia ana te kupu, ā, ko ētahi o ngā tūmomo rerekē:



Ko ngā **ngahere taketake** he ngahere ka nui ake ngā tūmomo rākau taketake.



Ko ngā ngahere tauhou he ngahere ka nui ake ngā tūmomo rākau tauiwi.



Ko ngā ngahere whakatipu e whakatōngia ana ngā rākau mō ngā take arumoni, pērā i te whakaputanga rākau, waro rānei.



Ko ngā **ngahere whakaputa** e whakahaeretia ana kia whakaputaina ētahi taumata rākau (papa rākau, pulp hoki/rānei). Kei roto i tēnei ko ngā ngahere huringa e topea rawatia (ā, ka whakatōngia anōtia) me ngā **ngahere whakaputa uhi haere** tonu e āta kōwhiria ana te hauhake, ā, e whakahaeretia ana kia mau tonu ai te uhi kāuru taumata nui.



E whakahaeretia ana ngā **ngahere pūmau** tauroa (mō ake tonu atu pea) me te whakapūmau tonu i te taumata teitei o te uhi o te kāuru.



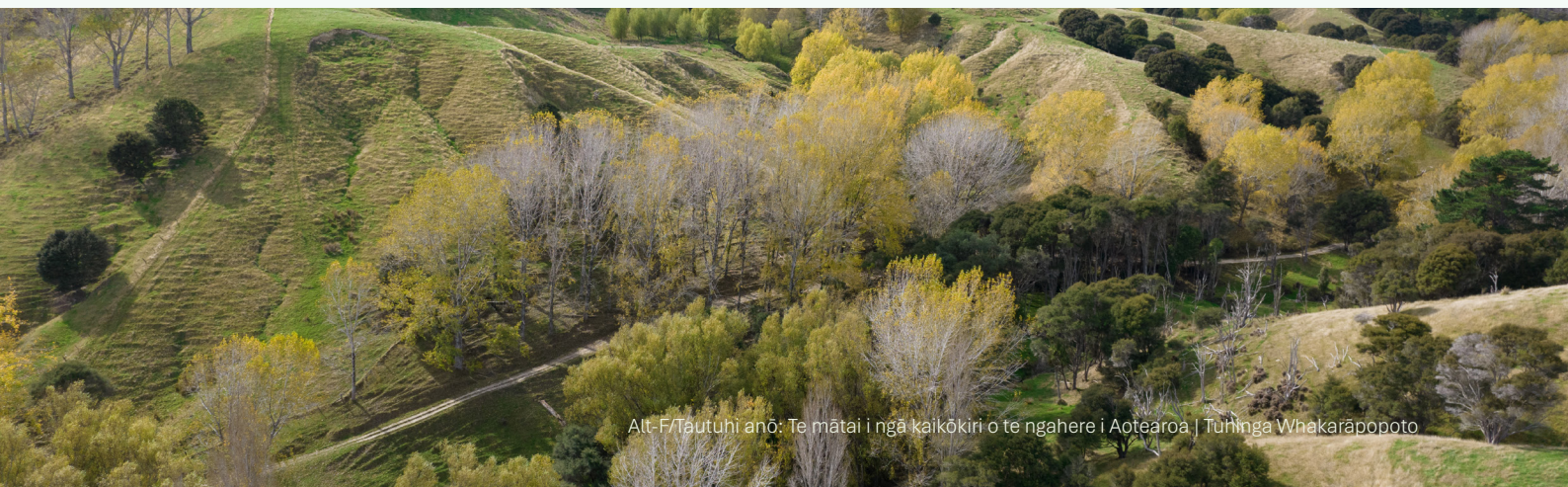
E whakahaeretia ana ngā **ngahere waro** mō te wehe mōriroriro waro me te whakaputu, ā, kāore e hauhaketia.



Ko te **pūnaha ngahere kē** he ngahere i Aotearoa ehara i te ngahere whakatiputipu paina e whakahaeretia ana i raro i te topenga o ngā rākau katoa, i te kaupapa ngahere waro rānei. Kei roto pea i te ngahere ngā tūmomo rākau taketake, tauhou hoki/rānei, ā, ka whakatūria ahakoa he aha te take.



Ko te **ngahere** he take e whakamahia ana e ngāi Māori mō ngā take whānui o te tautuhi he aha te ngahere, tētahi atu whenua rānei me ngā rākau maha e tipu ana. Kia mōhio mai, he maha ngā kupu mō te ngahere i roto i te reo Māori nā ngā rerekētanga o ngā reo ā-iwi. I konei e whakamahi ana mātou i te kupu ngahere, nā te mea koinei te kupu e kōrerotia whānuitia ana.



He aha te āhua o ō tātou ngahere ināianeī?

Kua 10.1 miriona ngā heketea ngahere i Aotearoa ināianeī, e uhi ana i te 38 ōrau o tō tātou whenua. Waru miriona heketea o ēnei he ngahere taketake i runga i te whenua Karauna, tūmataiti, Māori rānei, ā, e 2.1 miriona heketea he ngahere whakatō tauhou.

Ngā ngahere taketake

Ināianeī e toru tekau ōrau o tō tātou whenua katoa e kapi ana i ngā ngahere taketake, he hekenga i te 80 ōrau i mua i te taenga mai o te tangata, e ai ki ngā whakatau tata. Kua āhua ōrite te nui o te ngā ngahere taketake mai i te tau 1996.^{2,3}

Kei roto i ngā ngahere taketake ngā toenga o te ngahere tipuranga tawhito (ngā ngahere taketake me ngā rākau pakari nui kāore anō kia topea e te tangata) me ngā ngahere e haumanu ana, ngā mea tuarua rānei (he takiwā i whakamōtīa, engari kua hoki, e hoki ana rānei hei ngahere taketake).

E whakarōpūtia ana te nuinga o ngā ngahere taketake hei ngahere tawai, hei ngahere e whakauruutia ana te raurapa me te rākau koroī. Engari, ko ngā ngahere tawai te nuinga (ko tōna 60 ōrau).⁴ Kāore i te ōrite te tuari o ēnei puta noa i Aotearoa. Kāore hoki i te whakakanohi i te kanorautanga o ngā ngahere i mua i te taenga mai o te tangata.

He maha ngā ngahere taketake onāianeī kua heke te kaha, e kino ana rānei te kaha. Nā ngā tekau tau e tāmutumutu ana te whakahaere riha, i whakakinotia ngā ngahere maha e ngā tipu urutomo me ngā riha kararehe. E tāpiri ana te panoni āhuarangi i te kohuki taiao. E hiahiatia ana te pikinga o te whakahaere kia whakapai ake i te manawaroa o te ngahere, kia aukati hoki i ētahi atu mea kino.

Ko ētahi ngahere taketake mō ngā take arumoni, pērā i te whakaputa miere me te papa rākau, me ngā take arumoni kore, pērā i te whakapakari i te kanorau koiora, whakapai ake i te whakahaere wai me te whakaora i te mauri o te whenua. He āhua iti te rahi o ēnei kaupapa ina whakatauritea ana ki te huinga ngahere tauhou, engari kua pikingia e ngā kaupapa whakatō i ngā ngahere houēnei mahi.

Ngahere whakatiputipu tauhou

Kei roto i te 2.1 miriona heketea o te huinga ngahere tauhou i whakatōngia, ko tōna 1.8 miriona heketea (86 ōrau) he ngahere whakatiputipu e whakahaeretia ana mō ngā take whakaputa arumoni (te nuinga te rākau me te weu).⁶ Te nuinga o ēnei kei runga i te whenua tūmataiti, te whenua Māori rānei.

Ko te paina te tūmomo matua, ko tōna 90 ōrau o ō tātou ngahere whakatiputipu nā runga anō i te nui o te takiwā. Kua waihanga ngā tekau tau o te rangahau me te whakawhanaketanga hāngai i te ahumahi tino whāomo me te paina hei tūāpapa. Ka taea te whakatō ngā takiwā nui mō te utu iti e whakamahia ana i te taputapu kākano, ka topea ngā rākau katoa ina tae atu ki tōna 28 tau te pakeke, ā, ka whakatōngia anō i te hipanga o ngā tau ruarua. Ko tēnei whāomo te tūāpapa o te ahumahi ngahere e tāpae ana i te moniwhiwhi tōpūtanga ā-tau o tōna \$6.6 piriona (1.6 ōrau o te tapeke wāriu hokonga/GDP o Aotearoa), ā, e tuku mahi ana ki tōna 35,000–40,000 people tāngata.⁷

Kei roto i te toenga 10 ōrau o ngā whakatiputipu i Aotearoa ko ngā tūmomo rākau rerekē, ko te nuinga he fir Takarihi (5 ōrau o te takiwā whakatiputipu) engari ko te cyprus, te eucalypt, te redwood me ētahi atu hoki. I te nuinga o te wā e whakatōngia ana ēnei tūmomo tauhou kē i ngā rahi iti i waho atu o ngā whakatiputipu ahutahi nui, arā, hei uru rākau iti i runga i ngā pāmu.

Inakuanei, kua poapoa te NZ ETS i te whakatō i ngā ngahere whakaputa hou, e whakaratoa ana e ngā whiwhinga waro i te moniwhiwhi anō, me ngā ngahere waro e utua ana ki ngā moniwhiwhi waro. Ko te nuinga o ngā ngahere waro he whakatiputipu paina, e kōwhiria ana mō ngā pūtea nui e puta mai ana i te wehe mōriroriro tere.

Ngāi Māori me te ngahere

He mahi matua tā ngāi Māori i roto i te rāngai ngahere, he wāhanga nui o te rāngai mahi ngahere me te whiwhi ki ngā takiwā nui o te ngahere whakatiputipu tauhou (190,000 heketea) me te ngahere taketake (570,000 heketea).⁸ Neke atu i te haurua miriona heketea kei a rātou e kapi ana i ngā ngahere tauhou, nō ngā kamupene tūmataiti. I te tau 2022, ko te uara o ngā rawa ngahere Māori e \$4.2 piriona.⁹

Ko ngā hononga o ngāi Māori ki ō rātou whenua, ki ō rātou ngahere hoki he motuhake. Me whai whakaaro ina kōrerorero ana i te anamata o te whakatō i ngā ngahere hou. He maha ngā whānau, ngā hapū, me ngā iwi e whakaaro ana ko te whakatō i ngā ngahere hou hei ara kia whakahaumarua i a Papatūānuku.

I mua, nā te takahi i te Tiriti o Waitangi i ngaro ai ngā takiwā whenua Māori nunui, ā, i whakatōhenehene i ngā hononga a ngāi Māori ki ngā ngahere. I puritia tonutia ētahi whenua i roto i te Ture Whenua Māori Act 1993, i whakahokia rānei i raro i ngā whakataunga Tiriti, engari ko te nuinga o tēnei whenua he pāmamamo, ā, he iti rawa te whakaputa me te iti o ngā kōwhiringa hei whakamahi. Ko te whakatō i ngā ngahere waro tētahi ara kia whakamahi i te whenua kia whiwhi ki te moniwhiwhi, engari he wero ki ngā kaiwhakataua Māori e mahi ana i roto i te angawā o tētahi whakatipuranga ki tētahi whakatipuranga, nā te mea e aukati ana i ngā kōwhiringa mō te whakamahi whenua ā muri atu.

Ināianei, he tokomaha ngā kaipupuri whenua Māori e whakamātau ana kia whakamahi i ō rātou whenua hei mātāpuna manawaroa mō ngā uri whakaheke. Kei roto i tēnei ko te whakaputa moniwhiwhi me ngā tūranga mahi mā te ngahere arumoni, te pupuri i te whenua mō ngā take tuku iho, me te tāpae ki te whakahaumarua me te whāomoomo o te kanorau koiora ngahere.

Pouaka 2: Ngā painga o ngā ngahere

Ahakoia e mārama ana ngā painga arumoni e puta ana i ngā ngahere ahumoni, ka taea e ngā ngahere katoa (tae atu ki te paina) ngā painga taiao. He tino rerekē ēnei nā runga anō i ngā āhuatanga me te kaupapa whakahaere o te ngahere. Kei roto i ngā painga ko:

- te whakahaere o ngā pāhekoheko oneone-wai, e whakaiti ana i te ngāhorohoro, e whakapai ake ana i te whakawhena whenua, ka whakaiti i ngā pāpātanga o te waipuke, ā, e whakapiki ai te kounga o te wai.
- te nui ake o te kanorau koiora me te manawaroa pūnaha hauropi
- te whakahaumarua kararehe mā te hoatu i te tāwharau, te whakahaumarua me te kai
- ngā uara pāpori, ahurea hoki
- te whakapai ake me te whakaora anō i te mauri o te whenua.
- te wehe mōriroriro me te whakaputa o te waro, e tāpae ana ki ngā mahi whakamauru āhuarangi.

² <https://www.stats.govt.nz/indicators/predicted-pre-human-vegetation>.

³ Ministry for the Environment and Statistics NZ, 2024. New Zealand's Environmental Reporting Series: Our Land 2024.

⁴ Wyse et al., 2018. New Zealand forest dynamics: A review of past and present vegetation responses to disturbance, and development of conceptual forest models.

⁵ <https://www.stats.govt.nz/indicators/extinction-threat-to-indigenous-species>

⁶ <https://www.mpi.govt.nz/forestry/new-zealand-forests-forest-industry/about-new-zealands-forests>

⁷ <https://www.mpi.govt.nz/forestry/forest-industry-and-workforce/forestry-wood-processing-data>

⁸ Ngā Pou a Tāne, 2024. Tū Mai Rā! Te Whānau o Tāne: Growing the total economic value of our national Māori forest.

⁹ New Zealand Government, 2022. Te hau mārohi ki anamata: towards a productive, sustainable and inclusive economy: Aotearoa New Zealand's first emissions reduction plan.

E ahu ana tātou ki hea?

Nā ngā kaikōkiriā-oaha, ā-kaupapahere hoki kei runga a Aotearoa i te ara whiu kia whakatū i ngā takiwā tino nui o te whakaputa ngahere tauhou hou me ngā ngahere waro. Kāore e kore ko te nuinga o ēnei ngahere he paina, nā runga anō i te whakatuanuitanga o taua tūmomo rākau i roto i te ahumahi me te rerehua ā-oaha mā te whakaputa rākau me te wehe mōriroriro waro.

Te whakaputa rākau papa

He kaikōkiri ā-oaha tonu te hiahia ā-ao ki te rākau kia whakatū anō i ngā ngahere hou, e ōrite ana ki te āhua o te rautau kua hipa. Ko te paina tonu te kōwhiringa matua o Aotearoa mā te whakaputa rākau papa mā ngā take huhua, tae atu ki tana tipunga tino tere, te urutau ki te whānuitanga o ngā āhuetanga ā-taiao me te maha ngā ara whakamahi. Kua whakawhanaketia te tūāhanga ngahere o Aotearoa me te paina hei tūāpapa, nā reira, kāore tētahi atu tūmomo rākau i ōrite te nui o te mātai, o te whakawhanake rānei.

Te NZ ETS

Kei roto i te NZ ETS onāiane te ngahere, ā, e whakaaetia ana ngā kaiwhakaputa mātātoka kia hoko mai i ngā whakataurite tepenga kore (he āhuetanga motuhake o ngā kaupapa ā-ao katoa onāiane). Ki te whakaaetia tonutia te pērā, he nui rawa ngā whakamōrea ā-pāpori, ā-oaha hoki, tae atu ki:

- te aukatinga o ngā takiwā nui o te whenua nā runga anō i ngā ngahere me ngā pūnama waro, e tino aukati ana i te kōwhiringa o te panoni whakamahi whenua ā muri atu.
- te ngaromanga o te whenua whakaputa (tae atu ki ngā ngahere whakaputa) ki ngā ngahere pūmau me ngā pāpātanga ki ngā hāpori tuawhenua
- te tū ki te aroaro, ā muri ake, o ngā whakatipuranga e heke mai nei ngā pire o te whakapūmau i te huinga ngahere nui ake i roto i te ao e mahana haere ana.
- te pānga mai o ngā pūnama ki te Karauna mēnā ka whakakinotia ngā ngahere i whakatūria kia whakataurite i ngā putanga e ngā riha, ngā tahumaero, ngā takunetanga ā-taiao rānei.

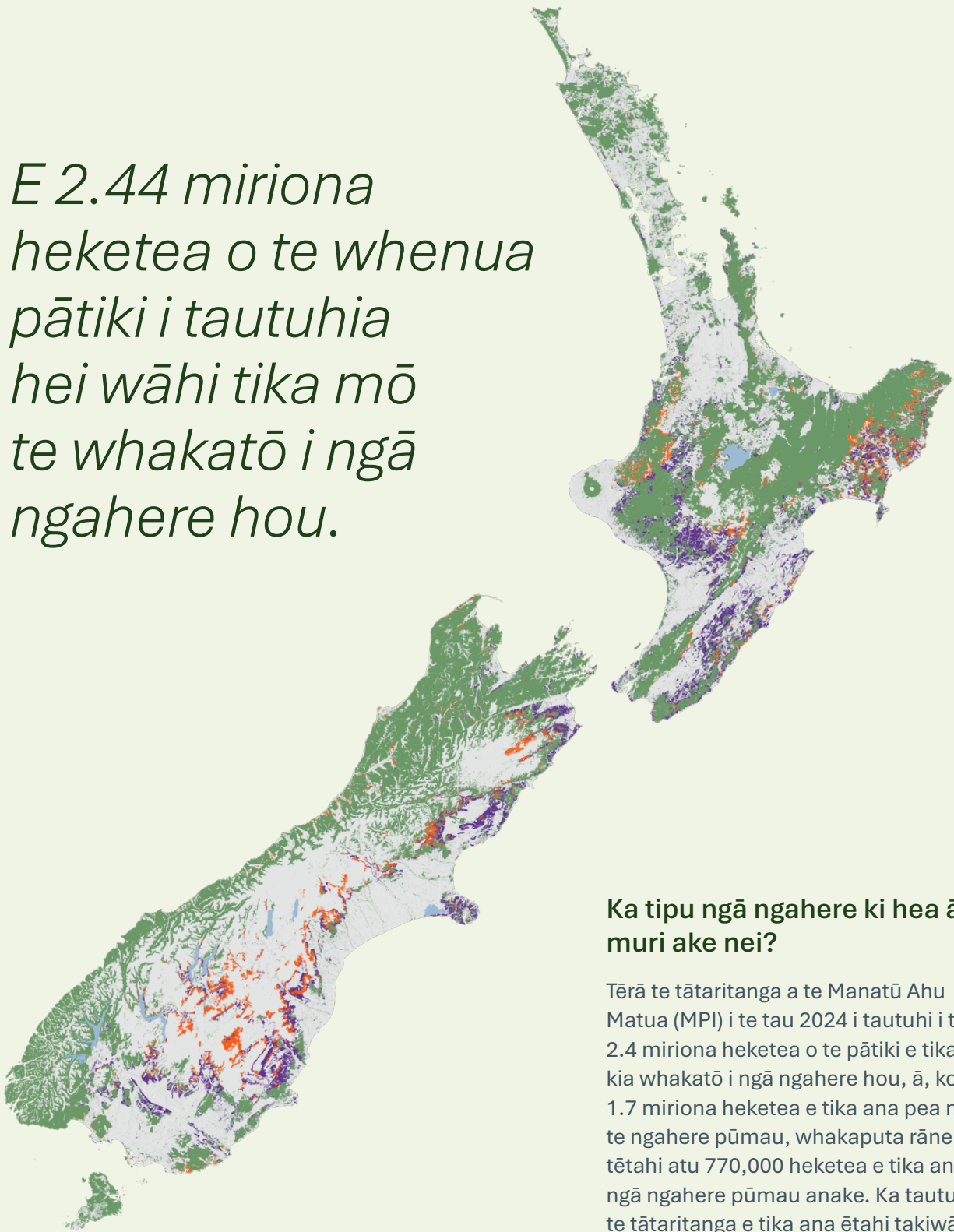
Ngā pāpātanga o te panoni āhuarangi

Mā te panoni āhuarangi e whakapiki ai ngā whakamōrea ki ngā ngahere onāiane, ā muri ake hoki. Ko ētahi o ēnei ko:

- ngā takunetanga uanga taikaha ake, me te whakamōrea o te ngāhorohoro me ngā paheke, ā, ka tukuna kia reremuri te para me te kōkiki
- ngā hau taikaha, e piki ai te whakakino ki ngā ngahere
- te piki o te whakamōrea ahi ki ētahi takiwā
- te piki o ngā rerekētanga ā-rohe i te uanga – he mākū ake ki ngā takiwā mākū, he maroke ake ki ngā takiwā maroke – me te aha he kohuki ki ngā rākau, ā, he nui ake te whakaraerae o ngā ngahere ki ngā riha me ngā tahumaero
- te tūponotanga pea o te horapa anō o ngā riha me ngā tahumaero onāiane, me te taenga mai o ngā whakamōrea haumarua koiora.

Me taea te karo e ngā ngahere whakaputa ngā āhuetanga ā-taiao e panoni ana tae atu ki te hauhaketanga (ko tōna 25 tau). Te āhua nei, e taea ai tēnei. Heoi anō, me taea e ngā rākau e whakatōngia ana mā te whakaputa waro tauroa te karo i ngā panoni i ngā tekau tau maha kia tū hei ngahere pūmau, tōitu.

E 2.44 miriona heketea o te whenua pātiki i tautuhia hei wāhi tika mō te whakatō i ngā ngahere hou.



- Ngahere onāiane
- Te pitomata mō ngā tumomo rākau katoa
- Te pitomata mō ngā tumomo rākau katoa, hāunga ngā whakaputa tauhou
- Roto



200 kiromita

Ka tipu ngā ngahere ki hea ā muri ake nei?

Tērā te tātaritanga a te Manatū Ahu Matua (MPI) i te tau 2024 i tautuhi i tōna 2.4 miriona heketea o te pātiki e tika ana kia whakatō i ngā ngahere hou, ā, ko tōna 1.7 miriona heketea e tika ana pea mō te ngahere pūmau, whakaputa rānei, ā, tētahi atu 770,000 heketea e tika ana mō ngā ngahere pūmau anake. Ka tautuhi te tātaritanga e tika ana ētahi takiwā nui o Te Wai Pounamu mō te whakatō i ngā ngahere hou, engari te nuinga o te whakatō i ngā ngahere hou i tū ki Te Ika-a-Māui. Waihoki, ko te whakatau tata o Te Papa Atawhai (DOC) e tika ana pea te 59,000 heketea o te whenua Karauna mō te whakatō i ngā ngahere hou, ā, inakuanei i kimi te kāwanatanga i ngā mōhiohio i ngā hunga tūmataiti e hiahia ana pea kia whakatō rākau ki te whenua whāomoomo tūmatanui.

He aha ngā ara kē?

He whānui ngā pūnaha ngahere kē e taea ai te whakaaro i Aotearoa, tae atu ki ngahere tauhou me ngā whakahaere kē, tae atu ki te whakatū i ngā ngahere taketake hou.

Ngā ngahere taketake hou

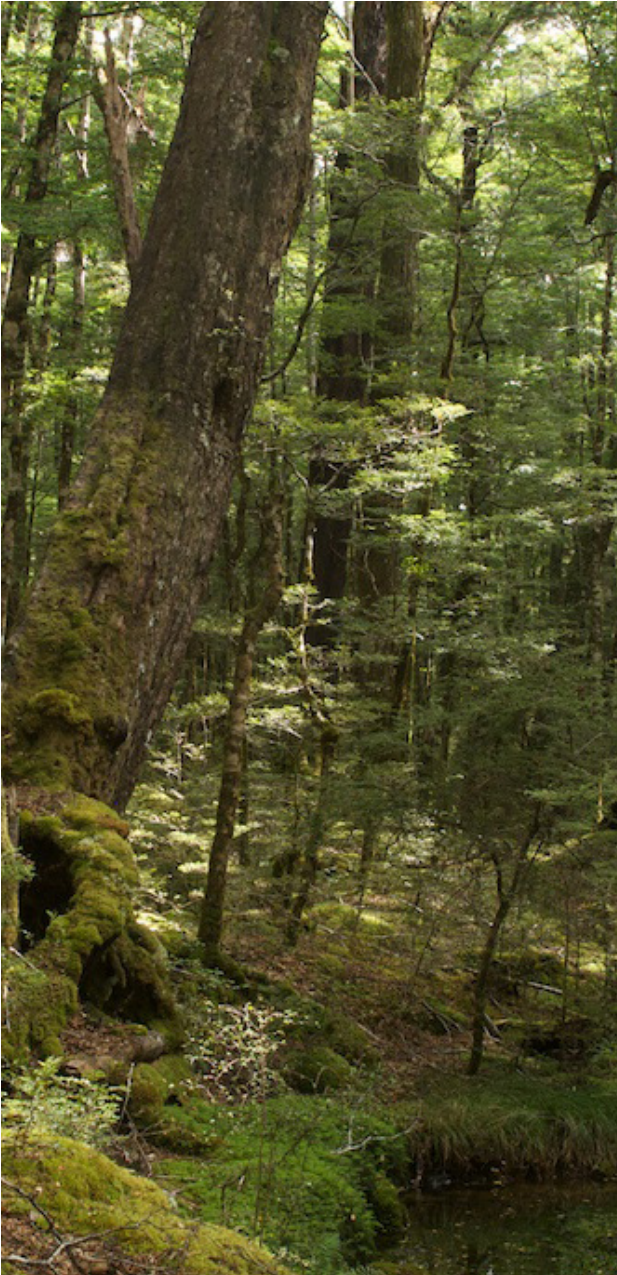
Ahakoia he nui te aronga o te hunga tūmatanui kia whakatū i ngā ngahere taketake hou, engari kāore i te tino mōhiotia me pēhea e angitu ina rahi ana te whakatū. He panoni taiao hira kua puta mai i te taenga mai o te tangata ki Aotearoa, tae atu ki ngā pēhanga whakamahi whenua, te whakaurunga o ngā tipu me ngā kararehe riha, me te ngaronga o ngā mātāpuna kākano taketake i ngā takiwā maha. Nā reira, he nui te tūponotanga e hiahiatia ana e te whakatō i ngā ngahere taketake hou ki te rahinga nui te ringa tanga kia angitu ai. Ko te whānuitanga o tēnei he āwhina noa i te whakahounga māori nei me te whakahaere o te browser me te tarutaru, tae atu ki ngā whakatipu tino apiapi o te whānuitanga o te kanorau o ngā momo rākau taketake. E whakawhirinaki te ahunga pai ki tētahi wāhi ki ētahi āhuratanga, tae atu ki te āhuarangi, te topography, te āheitanga, me ngā mātāpuna kākano taketake e wātea ana, te otaota i reira, ngā pēhanga browsing, ā, mēnā kua tīmata kē rānei te whakahou māori o ngā rākau. Ka piki ngā utu i te rahinga o te hāpaiora. Kāore e kore he pai ake te utu, e taea ai hoki, te āwhina i te whakahou anō me te whakatō i ngā tūmomo rākau taketake ina rahi ana, kua ko te whakatō matawhānui.

I tua atu i ngā utu tīmatanga o te whakatū i te ngahere, tērā pea he utu nui e haere tonu ana. Ka hiahiatia tētahi tūmomo whakatikatika ngahere kia whakahaere i ngā whakaaweawe o ngā tipu me ngā kararehe riha i te wā e tū ana te ngahere, otirā mēnā e whāia ana ngā ngahere teitei, kanorau hoki. Ki te kore he āwhina pērā, ka ōrite te putanga mō ngā ngahere taketake hou i ngā ngahere taketake onāiane. Kua hē ētahi o ngā whakatipu rahi nui i mua nā te kore i whakatikatikahia.

Pouaka 3: He aha ngā whiwhinga i te whakahaere pai ake o ngā ngahere onāiane?

Ko ētahi o ngā uara e rapuhia ana i roto i ngā ngahere taketake hou, e taea ai mā te whakahaere pai ake o te huinga ngā ngahere taketake onāiane. He maha ngā ngahere taketake onāiane e kino ana te kaha, engari he nui tonu te uara, e tautoko ana i te kanorau koiora taketake me te whakarato i te whakaputu waro nunui, te whakahaere wai me te whakahaere ngāhorohoro, tae atu ki ngā painga ahurea, rēhia, tukuora hoki. Heoi anō, mā ngā pēhanga ā-taiao, ā-tanga hoki, pērā i te panoni āhuarangi, ngā riha rānei, he uaua kia whakamau tonu i ēnei painga. E hiahiatia ana te pikinga o te whakahaere kia whakapai ake i te manawaroa o te ngahere, kia aukati hoki i ētahi atu mea kino. Ko tētahi whakamōrea i raro i te tirohanga whakamauru āhuarangi ki te kore e tino whakatikatika i ō tātou ngahere taketake ka noho kē pea hei mātāpuna matua o ngā putanga waro.

“Nā reira, he nui te tūponotanga e hiahiatia ana e te whakatō i ngā ngahere taketake hou ki te rahinga nui te ringa tangata kia angitu ai.”



He tūmomo rākau taketake e pāhekohekotia ana i runga i tētahi pāmu i te Wairarapa.

Te ngahere whakawhiti

He āhua hou te ngahere whakawhiti, e whakahaeretia ai ngā ngahere tauhou tipunga tere kia whakawhiti ki ngā ngahere taketake ā tōna wā. Ahakoa i te nuinga o te wā te paina te huanga tauhou, e tika ana pea ētahi atu tūmomo rākau tauhou.

Ko tētahi o ngā painga matua e kawatauhia ana i te ngahere whakawhiti, he ara tika kē ā-ahumoni pea kia whakatō i te ngahere taketake i te kore, ā, mā te whakawhiti ki te ngahere whakawhiti e utua ana e te wehe mōriroriro tere o te huanga tauhou. Heoi anō, ka kitea e te rangahau a Manaaki Whenua i mahia mō tēnei pūrongo he nui te tūponotanga o te 'hekenga waro' i te wā o te whakawhiti, ina whakakapia ngā rākau tauhou e ngā rākau taketake tipunga pōturi (i te tuatahi) e mau ana i te waro iti iho. He nui pea te pūnama waro ka puta mai i tēnei wā.

Kāore i te tino mōhiotia ētahi āhuatanga o te ngahere whakawhiti, tae atu ki:

- te ara tika kia whakahaere i te hātepe whakawhiti, ā, he aha ngā putanga tauroa
- ngā apiapi whakatō tika mō ngā huanga tauhou me ngā tūmomo rākau taketake e whāia ana
- te wā o te whakawhiti
- he pēhea te panoni o ngā taputapu waro ā tōna wā, ā, he pēhea e utua ana te whakawhitinga me te whakahaere haere tonu o te ngahere.

Ngā ngahere tauhou kē

Ka tautoko ngā momo rākau tauhou i te paina mā te tāpae i ngā huaira kanorau me ngā painga taiao rerekē (me ngā whakamōrea), tae atu ki ngā kōwhiringa arumoni, whakamahi whenua hou hoki. Ka tū pea ētahi hei tūmomo rākau tūpono mō te whakaputa rākau papa mēnā ka pāngia te paina e tētahi aituā koiora – ahakoa kāore tētahi atu tūmomo rākau e rata ana i te whānuitanga o ngā āhuetanga pērā i te paina.

He rerekē ngā painga me nga whakamōrea o ngā tūmomo rākau tauhou. Kei ētahi ngā huaira e tāpae ana i ngā painga taiao, pērā i ngā pūnaha pakiaka whakakotahi, e whakarato ana i te whakahaere ngāhorohoro pai, e rata ana rānei ki te whakamarumarū, e tika ai mō te ngahere uhi haere tonu. E whakaraerae ana ētahi ki ngā riha me ngā tahumaero, he nui ake te tūpono ahi i ētahi atu tūmomo rākau. I ngā wā maha, ko te ahunga whakahaere ngahere he kaikōkiri nui ake o ngā pāpātanga taiao whānui i te tūmomo rākau.

Ahakohe maha ngā tūmomo rākau kē e taea ai te wāhi nui ake i te ngahere o Aotearoa, kua whakawhanaketia ētahi, ā, kua nui ake te manakohanga i ētahi atu. Kei roto i ngā taurako ngā coast redwoods, eucalypts, cypresses, poplars me te momorua radiata-attenuata pine.

Te utu
whakatō



Te āta whakahaere
i ngā rākau



Te utu
whakaputa
pihinga



Ngā wero ki te whakatō
i ngā ngahere taketake

Te whakahaere
riha/tarutaru



Te tiki/te oranga
kākano



Ngā poapoa
ahumoni



Ko ngā kaupapa whakahaere kē

He maha ngā tūmomo ahunga whakahaere ngahere e whakahaeretia ana i te rahinga iti i Aotearoa e taea ai te whakamahi whānui.



Ko te **ngahere whakaputa** uhi haere tonu he kaupapa e whakapūmau ana i te uhi kāuru i ngā wā katoa, ahakoa tērā te paku hauhake, pērā i te hauhake i te rākau i tipakohia, i te wāhanga paku rānei. Mā tēnei e whakawhanake te ngahere pakeke rerekē me te kanorautanga anga nui ake i te ngahere pakeke kotahi. Ka whakakotahi tēnei ahunga i ngā uara arumoni me ngā uara taiao tauroa, pērā i te kanorau koiora, te whakahaere ngāhorohoro me te whakaputu waro.



Ko te **ngahere ahuhenua** te whakaurunga o ngā rākau ki ngā horanuku ahuhenua. Kei roto i tēnei te whakatō i te taha o ngā awa, ngā rākau tāwharau me ngā rākau me ngā āputa whānui me ngā takiwā e tītongitia ana. Mā te pāhekoheko o ngā rākau tika ki roto ki te pātiki e whakaiti te ngāhorohoro i te whenua pukepuke me te whakapai ake i te toiora kararehe mā te whakarato i te whakamarumarū me te tāwharau. E hāngai ana ki te momo rākau, ka taea e te ngahere ahuhenua te whakarato kokinga waru i te wā o te tauraki me te iti o te kai.



He maha ngā kaupupuri whenua Māori e whakahaere ana i ngā ngahere mā **ngā mātāpono nō te ao Māori**, pērā i te rangatiratanga, kaitiakitanga, mauri, whakapapa, me te ahikāroa i roto i ngā ngahere arumoni me te ngahere whāomoomo. Hei tauira, ka whakahaeretia ētahi ngahere mā te whakaputa rākau papa me te hauhake, te whakangao kararehe rānei a te whānau.

“I ngā wā maha, ko te ahunga whakahaere ngahere he kaikōkiri nui ake o ngā pāpātanga taiao whānui i te tūmomo rākau.”

He aha ngā tauārai ki te ngahere kē?

Ka tāpaetia pea e te huinga ngahere kanorau i ngā painga ā-taiao, ka whakapikingia te manawaroa, ā, ka whakatuwhera i ngā kōwhiringa ohaoha hou, engari he huhua ngā tauārai ināiane.

Te NZ ETS

I raro i ngā whakaritenga onāiane, e tāpae ana te NZ ETS i te whānuitanga o ngā take me ngā tauārai ki ngā tūmomo ngahere kē:

- He nui ake ngā hua o ngā tūmomo rākau tipunga tere, pērā i te paina, mā te NZ ETS i ō ngā tūmomo tipunga pōturi, pērā i te nuinga o ngā rākau taketake.
- Ahakoa tērā ngā tūtohi huatuku waro ā-rohe mō te paina, e whakarōpūtia ana ngā tūmomo kē ki ngā whakarōpūtanga ngahere i te rahinga ā-motu. Nā reira, ka iti iho, ka nui ake pea te whakatau tata onāiane mō te waro e whakaputua ana.
- E whakapāhunu ana ngā utu whakahaere onāiane i ngā ngahere tipunga pōturi, i te whakatū me te rēhita hoki/rānei i te NZ ETS.

Te waeture

E hāngai ana ngā tūmomo ngahere rerekē ki ngā huinga ture rerekē nā runga anō i te momo rākau, te āhua o te puritanga whenua, te whakamahi, ā, mēnā e whakatōngia ana, e whakahou ana rānei. Ko te tikanga o ngā whakahou haere tonu o te pūnaha whakahaere rauemi e panoni tonu ana ētahi wāhanga nui o tēnei anga, e tāpiri ana i te rangirua ā-kaupapahere ki tētahi anga whakahaere kua whīwhiwhi kē.

Ko ētahi o ngā tauārai waeture matua ki ngā pūnaha ngahere kē e whai ake nei:

- I raro i te **Forests Act 1949**, e whakaturea ana te mahere, te puka whakaaetanga rānei i whakaaetia ai mō te hauhake papa rākau i runga i te ngahere onāiane, e whakahou ana rānei i runga i te whenua tūmataiti, ā, he tino iti te rahi o ngā papa rākau e taea ana te hauhake. Heoi anō, kāore he aukati i te hauhake i ngā ngahere taketake i whakatōngia. Ka whakapāhunu pēa tēnei

i te tautoko a ngā kaipupuri whenua ki te whakahou i ngā ngahere taketake, nā te hiahia ki te whakaputa rākau papa – he pai ake te utu o tēnei kōwhiringa i te whakatō i te kore. He rerekē hoki te aronga o ngā kaunihera ki te hauhake i raro i te Forests Act.

- E hāngai ana ngā **National Environmental Standards for Commercial Forestry** ki te taputapu whakamahere ngāhorohoro waiwai mō te tauārai whakamōrea i te tīmatanga, he tūmomo tauārai ki te tautuhi i ngā takiwā e taea ai te pāhekoheko i ngā pūnaha rahinga iti, iti te kaha ki ngā horanuku ngāhorohoro..
- I te āwangawangahia mā te tautuhi i ngā Significant Natural Areas (SNA) mā roto i te **National Policy Statement on Indigenous Biodiversity** e whakapāhunu ana i te whakatū o ngā ngahere taketake hou me ngā uara kanorau koiora nui (pērā i ngā ngahere taketake me ngā ngahere uhi haere tonu) te whakahaumarua rānei o te kanorau koiora i roto i ngā ngahere whakaputa' onāiane. Kua mutu ngā herenga kia tautuhi ngā kaunihera i ngā SNA i mua i te Oketopa o 2027, engari e tāpae ana tēnei i te māramatanga tauroa mō te pakihī tekau tau maha pērā i te ngahere.
- Ko te paina te otinga i tino whakaaetia whānuitia i roto i ngā paerewa hāngai o te **Building Code**. Ahakoa kāore tēnei e awere ana i ngā papa rākau kē i te rāngai waihanga, ka kore mōhio ina whakamahia ana, he nui ake te utu, ā, ka pau hoki te wā.

Te ohaoha

He wāhi uaua i roto i te ara tukutuku me whakatika ngā ara kē kia taea ai te āheitanga ā-rahi, ā-ohaoha hoki. He nui ngā utu kia whakatū, kia whakahaere hoki, ā, kāore i te tino mōhiotia he aha ngā hua ahumoni ina tauritea ana ki te topenga o ngā rākau katoa mō ngā paina. Hei tauira, ko ngā pūnaha whakaputa kē me ngā huringa roa ake, te hauhake ngoto iti iho rānei e hiahia ana ki ngā taiahumoni papa rākau uara nui kia āhei ā-ohaoha. Heoi anō, tērā pea kāore i te tino whakawhanaketia aua taiahumoni nā te whakarato hārakiraki, te kounga rānei o ngā papa rākau kē. He take anō te āhei ki te tūāhanga, pērā i ngā mira me ngā whatunga iiki, pērā hoki te nui o ngā kākano kounga me te iti o te pūkenga ki ngā pūkenga ngahere kē.

He tino tauārai ngā utu nui i te tīmatanga. I te nuinga o te wā \$25,000 ia heketea te utu o ngā whakatō rākau taketake apiapi nui.¹⁰ He nui ake pea ngā utu i runga i te whenua uaua, mēnā e hiahiatia ana te whakahaere riha, te whakatū taiapa rānei. Kua tīmata te rangahau ki ngā ahunga whakatū ngahere take utu iti.

Kua whakatūria ētahi tahua kāwanatanga ki te whakatenatena i te whakatō i ngā ngahere hou, ā, e mōhiotia ana te kaupapa One Billion Trees mō te whakatairanga i ngā tūmomo rākau taketake, me ngā tūmomo kē hoki. Heoi anō, kāore ēnei tahua e utu i ngā utu katoa o te whakatū i ngā tūmomo rākau taketake, i te whakatikatika tauroa rānei o ngā takiwā me ngā ngahere. Ki te kore e whakahaeretia i te tauroa, kāore e taea te mōhio ka tika te hauora o te ngahere ā muri ake me ana painga.

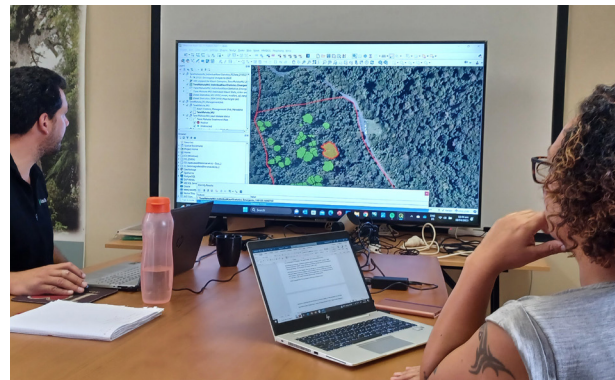
Kia parahau te whakangao nui ake ki ngā ara kē, me mātua mōhio ki ngā utu me ngā painga o ngā ratonga taiao o te paina i topea katoatia me ngā ara kē. Heoi anō, he uaua kia ine i ēnei ratonga, ā, he pātai hoki me pēhea e hoatu i ngā painga ahumoni.

I tua atu i ēnei take, kei roto i ngā tauārai ki ngā pūnaha ngahere kē ko te papare i te panonitanga i roto i te ahumahi ngahere, te utu o te reretahi ahumahi nui ake me te kore ahunga tauroa mō te ngahere i Aotearoa.

Te wāteatanga o ngā mōhiohio me te rangahau

He tauārai anō ngā āputa rangahau, whakawhanake hoki. Kua tino whakangao a Aotearoa i ngā rauemi rangahau ngahere ki te paina e topea katoatia ana. He ngāwari te whiwhi ki ngā mōhiohio me ngā pūkenga tika mō ngā wāhanga katoa o te hātepe mai i te whakatō ki te whakaputa. E haere tonu ana te whakangao ki te rangahau me te whakawhanake paina, ā, ka nui tonu ake i ō ētahi atu tūmomo rākau.

Engari, kāore tātou i te tino mōhio ki ngā whetoko o ngā pūnaha ngahere kē, mai i te tinaku kākano me ngā nuka whakatū ki ngā ohaoha o ngā kaupapa whakahaere kē me ngā āhuatanga o ngā papa rākau kē. Nā te kore o ngā mōhiohio i nui pea te whakamōrea o te ngahere kē, ā, he nui hoki pea te utu. Ina whakangao ana ki te ngahere kē, he tau poto, he korara, ā, kāore i tuarhia ngā kitenga i ngā wā katoa. He tino tika tēnei mō te kaupapa whakatō i ngā ngahere hou, e arohia ana te whakatō i te tuatahi, me te iti o te aroturuki haere tonu, o te tuari o ngā putanga rānei. He nui ake ngā mōhiohio mō te whaitake o te utu me te angitu mēnā he pūnahanaha te kohikohi me te tuari o ngā akoranga nō ēnei kaupapa.



E whakaatu ana te rangatira o Te Roroa, a Taoho Patuawa (taha mauī), i ngā taputapu GIS e whakamahia ana e ia ki te whakahaere i te *Phytophthora agathidicida* i tana tari i te ngahere o Waipoua.

¹⁰ Nā te uiui ki ngā kaimahi ngāherehere taketake, me te whakaaro o ngā apiapi whakatō noa o te 4,444 stem/ha, te whakarato kākano i te whakatipunga arumoni, te whakamahi i te rōpū whakatō ngaio, me te tau kotahi o te whakatinanatanga tuku me te whakatō ki ngā wāhi moremore. (Forbes Ecology, 2022)

“Ko ngā hononga o ngāi Māori ki ō rātou whenua, ki ō rātou ngahere hoki he motuhake. Me whai whakaaro ina kōrerorero ana i te anamata o te whakatō i ngā ngāherehere hou.”

Ngā tauārai kei te aroaro o ngāi Māori

He tauārai anō kei te aroaro o ngāi Māori nā ngā tepenga ōkiko o ō rātou whenua.

E pūhuitia ana ēnei tepenga e ngā wero kia whiwhi ki te whakangao mō te whakawhanaketanga. Mā ngā anga puritanga whenua whiwhiwhi e uaua ai mā ngāi Māori kia hoko i te whenua, kia whiwhi rānei ki te haupū rawa rānei mō te whakawhanake whenua. Nā reira, me waihanga ngāi Māori i ō rātou ake kōawa pūtea, me tino whakawhirinaki rānei ki te pūtea a te kāwanatanga kia tautoko i te whakawhanaketanga o ō rātou whenua. E tāpae ana te NZ ETS i tētahi ara, ā, kua kōkiri i te tūmanako ki te ngahere waro me te ngahere whakawhiti hei ara ki te whakatū i ngā ngahere taketake.

Heoi anō, ka whakataumahatia ngā kaupupuri whenua Māori e ngā ture o te NZ ETS, otirā te ture e mea ana ko ngā whenua i whakatōngia ngā ngahere i muri i te tau 1989 e taea ai te whiwhi ki ngā whiwhinga waro mā te NZ ETS. Kua whakatōngia ngā ngahere ki te nuinga o te whenua i whakahokia ki ngāi Māori i mua i taua wā, nā reira kāore māraurau ana kia whiwhi ki ngā whiwhinga anō i roto i te kaupapa nei.¹¹ Tērā pea ka kino te pānga o ngā panoni o ngā whakaritenga NZ ETS ki ngā kaupupuri whenua Māori.



Ko te waharoa kei te Riuwaka Resurgence, Te Papa Rēhia ā-Motu o Kahurangi.

¹¹ I rēhitatia aunoatia ngā ngāherehere i whakatūria i mua i te tau 1990 i roto i te NZ ETS mai i te timatanga. I whakawhiwhia ētahi whiwhinga waro ki ngā kaupupuri o ēnei ngāherehere i mua i te tau 1990 hei utu paremata wā kotahi, engari he pūnama whakakore, ā, me whakahoki i ngā whiwhinga ki te topea te whenua. Kāore whiwhia anōtia he whiwhinga waro mō ētahi atu wehe mōriroriro.

Ngā tūtohu

He urupare ki ngā take i whakarewahia i roto i tēnei whakatewhatewha, kua tuku te Kaikōmihana i ngā tūtohu 15, i whakarāpopotohia i raro iho. Mō te roanga o ngā tūtohu, tirohia *Alt-F Reset: Examining the drivers of forestry in New Zealand*.

Te whakahou ETS

- 1 Whakahoungia te NZ ETS kia whakakore i ngā whakataurite ngahere mō ngā putanga mātātoka. Whakamahia te moniwhiwhi hoko kairapu nui ake hei pūtea mō te whakatō i ngā ngahere hou tino tika ki ngā wāhi e tino hiahiatia ana (arā, ngā ngahere taketake pūmau i runga i ngā whenua tino ngāhorohore; whenua Māori).
- 2 Waihanga i te kaupapa hokohoko 'ira koiora' kē e whakaae ana kia whakatauritea te mahana nō ngā putanga mewaro pūkoiora e te ngahere whakaputa me te paina me ētahi atu momo tika.
- 3 Whakahou i te whakarōpūtanga ngahere pūmau i roto i te NZ ETS. E tika ana kia whakaturea kia whakamahere ngā kaipupuri ngahere pūmau i te whakahaere o te ngahere, me te waihanga i ngā whakarōpūtanga, me ngā ture hāngai, mō ngā ngahere pūmau rerekē.

Te whakahaere whakamōrea pai ake

- 4 Me whakatūturu te Kāwanatanga he pūnahanaha te aroturuki, te whakakakau, te whakahaere hoki o ngā whakamōrea ōkiko tauroa ki ngā ngahere o te motu me ngā whakamōrea ahumoni e puta pea ki te ahumoni ngahere me te Karauna.
 - 5 Whakatewhatewha he pēhea te hekeutu o te uara o te wehe mōriroriro waro ngahere i raro i te NZ ETS kia whakaata i ngā whakamōrea o te kore pūmau o te ngahere.
 - 6 Me whakatewhatewha te Manatū Taiao i ngā ara hei whakatūturu e utu ana ngā kamupene ngahere i ngā utu o te whakakino ā-taiao nā rātou anō i whakaputa. Kei roto i tēnei ko te whakamahi i ngā utu, ētahi atu nuka taiahumoni me te whakahounga o te waeture.
 - 7 Whakakorengia te hauhake e topea ai te katoa o ngā rākau ki ngā takiwā he nui te whakamōrea. Ki te pērā, me tautuhi, me whakamahere hoki ngā takiwā tino whakamōrea ki te arinui tino nui.
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Te panoni waeture mō te ngahere arumoni kē

- 8** Arotakehia te pānga o te Forests Act ki ngā ngahere taketake e whakatūria ana mā te whakahou māori me te tautoko.
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- 9** Te whakawhanake i te ārahi e pā ana ki te aronga a ngā kaunihera ki te hauhake rākau papa taketake e mahia ana i raro i te Forests Act.
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- 10** Tīmatahia tētahi hātepe kia whakaae ki ētahi rākau papa kē hei otinga tika i raro i te Building Code, tae atu ki te arotake i te mematanganga o ngā komiti e tuku whakaaetanga ana ki ēnei otinga.
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Te pūtea, ngā mōhiohio me te rangahau

- 11** Kia arohia ngā kaupapa pūtea whakatō i ngā ngahere hou ā muri ake nei ki te whakatū me te whakatikatika tauroa. Ka taea te whakauru i te moniwhiwhi i ngā hoko kairapu NZ ETS, me ngā utu mō ngā ratonga pūnaha hauropi, me te pūtea a ngā kaiutu tāke rānei hei mātāpuna pūtea mō te whakatikatika i ngā ngahere mō ngā ratonga pūnaha hauropi. Me whakauru ki ngā kaupapa whakatō i ngā ngahere hou te whakamahere whakatikatika, aroturuki, pūrongo hoki.
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- 12** Whakatūturu he nui ake te taumahatanga o ngā pūnaha ngahere kē i roto i te whakaarotau o te taiao me te rangahau hāngai ki te ngahere.
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- 13** Whakawhanaketia me te whakatikatikahia tētahi pūnaha raraunga whakatapoko tūmatanui kia whakapai ake te wāteatanga me te whakamahinga o ngā mōhiohio onāiane e pā ana ki ngā pūnaha ngahere kē.
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Kaupapahere ngahere

- 14** Me whakamātau ngā kāwanatanga kia whakawhanake i te taumata o te whakaaetanga whakawhiti pāti mō ngā whakaaro whānui o te kaupapahere ngahere, tae atu ki te nuinga o te kanorautanga o te huinga ngahere e hiahiatia ana, ā, me pēhea e whakatutuki.
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- 15** Ahakoa he aha te panoni i ngā kaupapahere ngahere i roto i tēnei pūrongo, me kōrerorero ki ngāi Māori i te tuatahi.
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