



Te hononga o
te āhuarangi
hurihuri ki a koe

KŌWAE AKO 3 HE TIROHANGA AO MĀORI

Mō ngā SMEs e whai ana ki te whakatinana i te toitū wāroa mā te whakamahere urutaunga, he mea nui kia mōhio ki tā te ao Māori titiro ki te āhuarangi hurihuri. Ka kōkūhuna e tēnei kōwae ako ngā mātāpono mātutua me ngā uara e puritia ana e ngā Māori maha, tae atu ki ērā e whakahaere pakihi ana, e mahikuhu ana rānei.

Te Tironga Māori – he tirohanga ahurea

Pērā i ētahi atu ahurea taketake, he hītori auroa o te urutau ki ngā panonitanga taiao tō ngāi Māori. I te horopaki o te whakamāherehere urutaunga āhuarangi he whaitake ki te āhukahuka i ēnei tikanga.

Waihoki, tērā anō hoki ētahi āhuatanga o te āhuarangi hurihuri ka rerekē pea te pā ki a ngāi Māori, ahakoa mā ngā hono ki te whenua me te taiao, mā ngā momo mahi rānei e ārahi ana i a ngāi Māori, e whai mahi ana rānei pēnei i ngā ahumahi mātāmua, i te hangahanga rānei. Ka tino whakatōmenehia ētahi o ēnei tūraru i a He huringa āhuarangi he huringa ao: [a changing climate, a changing world](#).

Mātauranga Māori – te mātauranga tuku iho o ngāi Māori

He māramatanga whaipanga tō te Mātauranga Māori ki te mārama, ki te urupare anō hoki ki te āhuarangi hurihuri.

Kua tukuna iho tēnei mātauranga i roto i ngā whakaturanga, ā, ka whakaurutia ngā kitenga o ngā panonitanga i te taiao me ngā huringa.

Nō mai rānō, kua mātai, kua rekoata anō hoki a ngāi Māori i ngā tohu i te taiao e tohu atu ana ki ngā panonitanga i te taiao. E kitea ana ēnei tohu i ngā whanonga a ngā tupu, ngā kararehe me ngā huringa huarere. Hei tauira, ko te wā e heke ana ngā manu, te puāwai mai o ētahi tupu. Kua taumano te whakamahia o ēnei hei waitohu i ngā huringa ā-kaupeka. Ka hāngai ēnei kitenga ki ngā kitenga pūtaiao o mohoa nei.

Waihoki, e whakarato ana ēnei i tētahi orotau torowārahi i te āhuarangi hurihuri.

I te nuinga o te wā, ka arotahi te mātauranga ki te āhua o te whāuitanga o ngā koiora katoa me te hiranga o te rauhi i ngā mea katoa e noho ana i te taiao. Hei tauira, e whai tikanga ana te toitūtanga o ngā rauemi ki ngā uara Māori me ngā mātāpono, ā, tērā te tūpono ka ārahi ēnei i ngā pakihi e puritia ana e ngāi Māori. Mō te taha ki te mauri roa o ngā pakihi, ka whakamātāmua te tiakitanga me te whāomoomo o te taiao (arā, te taiao māori) ki mua noa i te huanga wāpoto.

Ko ngā mātauranga hei ako mā tātou i te ao Māori

Ko te amorangi ki mua, ko te hāpai ō ki mua

Ka tū te rangatira ki mua, kei muri ko ngā kaimahi hei tautoko

E whakamihi atu ana tēnei whakataukī ki te hiranga o te whakamahere me te whakarite. Ka kōrero hāngai tonu atu ia ki te matea o ngā kaimahi hei kaitautoko, e angitu ai te rangatira kei mua. I te nuinga o te wā ka whakaata ngā uara pakihi i ōu ake mātāpono whaiaro, ahurea anō hoki. Ko ngā uara pakihi e kauawhitia ana e tō SME ka āwhina i a koe ki te kōwhiri i te huarahi ka whāia. Ka whakaaweawe hoki aua uara i te āhua e whakaraupapatia ana ngā kōwhiringa, ā, ko ēhea kōwhiringa e whakaarotia ana he tika, he whai tikanga hoki.





Mātāpono

Mātāpono	Whakaarohanga
Taurite	He mea nui te tiaki i te taurite i ā tātou kurutete katoa hei rangatira o ngā SME. Waihoki, ka whakaarohia e ā tātou tikanga pakihi te āhua e pā atu pea tātou ki te taiao. He whakaarohanga matua tēnei. Ka hāngai anō hoki te taurite ki te āhua o tā tātou whakarite ka āwhina i ō rautaki pakihi, kōwhiringa hoki ki te whakatutuki i tētahi whakarato toitū o ngā ratonga, ngā hautaonga, ngā kiritaki hoki/rānei.
Utu (tauutuutu, utunga me te whakaeanga)	He whakaarohanga matua tēnei ki te nui o te tukumuri a tō pakihi i te taiao me ngā haporī e mahi ana koe mā ō kohakoha pakihi. Hei uara, e whakamahi atu ana te tauutuutu he haepapa tō tātou ki te whakarite ka tiakina tō tātou taiao kia hauora tonu.
Whanaungatanga (ngā piringa me te whakawhanaunga)	E whaitake ana ki te angitu o te pakihi te whakawhanaunga atu a ngā rangatira pakihi ki ngā whānau, ngā mema o te haporī me ngā kiritaki. Mō te taha ki te urutaunga, ko te kaha o tō whatunga pakihi ki te āhei atu ki te tautoko, ki ngā pārongo, ki ngā pūkenga, ki ngā whatunga i anamata me te raukaha, katoa katoa e whai tikanga ana ki ngā tohuine angitu pakihi.
Manaakitanga (te whakatinana i te ohaoha, te tiaki, te tautoko, te taurima rānei)	He mea nui te raukaha o tō pakihi ki te komokomo ki ō tikanga i te manaakitanga ki tāngata kē atu (tae atu ki te taiao). I te nuinga o te wā e whakaarohia ana tēnei raukaha e te auhokohoko. Hei tauria, ka tohu te whakamahi i ngā hautaonga tautaiāo me ngā rawa pōpopo i te manaakitanga. Ka whakaata hoki ngā tikanga whāomoomo pūngao i te whakamātau ki te whakaheke i te pānga ā-taiao. Waihoki, ka miramira ēnei kohakoha i te tautoko i ngā mahi tautaiāo me te whakaiti i te tapuwae waro.
Whakapapa (tātai)	Ki tā ngā uri Māori, ka tīmata ēnei hono ā-whakapapa tāhuhu ki te taiao i ngā pūrākau orokohanga o Rangīnui rāua ko Papatūānuku. Mō ngā rangatira pakihi, he whakapapa anō hoki tō tō pakihi e whātui atu ana ki te māketē, ki tētahi whatunga kiritaki, ki te tautoko pakihi i oti ai i a koe te whakamau. He mea nui ki tō angitu hei SME kia whakarite koe e whakapakaritia ana ō hono ā-whakapapa, waihoki, e tūngia tonutia ana tō 'ahi kā'.
Mauri (te iho o te ora, te āhuratanga tūturu me te ora o te koiora, o te hinonga rānei)	Ko te mauri te āhuratanga e puta ana i a tātou mā roto i ā tātou pāhekoheko me ō tātou koronga. E whakaawe ana te mauri i te hunga katoa e whakapākia ana e tātou. Ka puta i a ia he āhuratanga o tātou hei rangatira, o ā tātou kaimahi, ā, i te nuinga o te wā, me ā tā tātou pakihi. Whakaarohia me pēhea te whakaahua o tō mauri e ērā atu tāngata kia riro mai ai koe hei kanohi pai rawa atu mōna.
Mana (te ihi, te whakahirahiratanga, te whakaawenga, te tūnga)	Ka whakarei ake, ka whakaiti rānei tātou i tō tātou mana tangata, mana pakihi hoki. Ina toitū, hauora hoki tō tātou mana tangata, mana pakihi hoki, e whakaatāngia ana tēnei i ā tātou take pakihi. Waihoki, mehemea he hauora te mana o tētahi, ka whakaatāngia anō hoki tēnei. E āwhina ana te whakamahere urutaunga āhuarangi me ētahi atu whakamahere pakihi ki te whakarite e whakaata paingia ana tō tātou mana tangata, mana pakihi hoki i roto i ā tātou mahi katoa.

Te ao Māori me te āhuarangi hurihuri



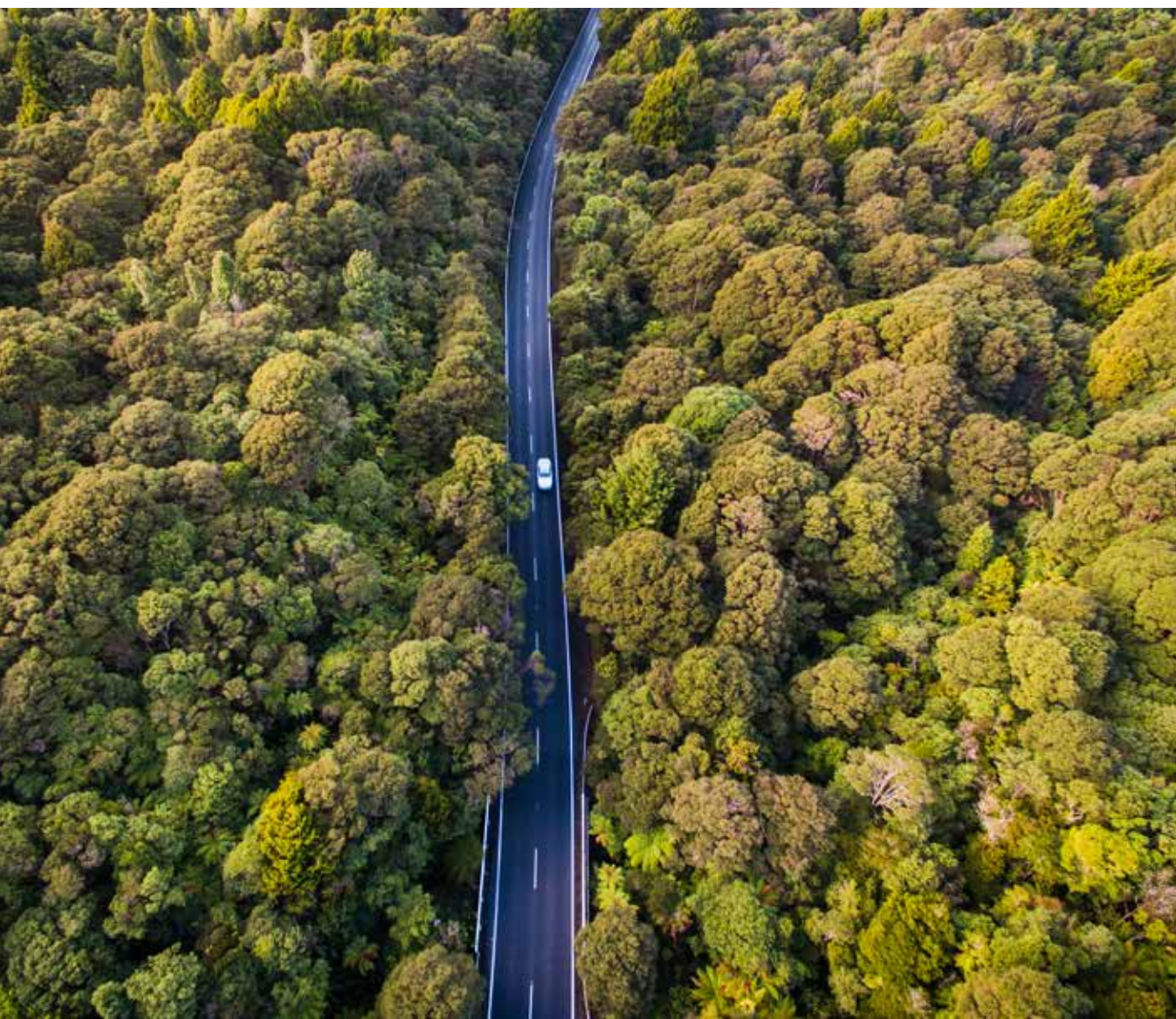
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E āwhina ana ēnei mātāpono Māori ki te whakaatu i te hiranga o te taiao ina whakahāngaitia ki ngā tikanga pakihi. Ka taea aua mātāpono te whakamahi hei tauira ki te huritao ki te whakamahere urutaunga āhuarangi, me te wāhi whānui o tō SME ki tēnei.

E whakahāngaitia ana tēnei huarahi ki te ia ā-ao e hakune ana te kauawhi, te whakamahi hoki i ngā tikanga pakihi taiao toitū, takopori hoki. E whakamahia ana anō hoki aua tikanga ki te whakapoapoa i ngā kiritaki. Kia waihangatia e koe he mahere urutaunga āhuarangi, ka whai arawātea koe ki te arotake mehemea e hāngai ana ō uara pakihi ki ngā tikanga pakihi toitū me ngā mātāpono.

Mō te roanga atu o ngā pārongo

Kei te hiahia ahau he pārongo anō e pā ana ki...	Rauemi	Whārangi
Te āhua o te pā mai o te āhuarangi whakarerekē ki a ngāi Māori (huri noa i te motu)	He huringa āhuarangi he huringa ao: a changing climate, a changing world	Ngā whārangi katoa
Te āhua o te pā mai o te āhuarangi whakarerekē ki ngā pakihi Māori i Tāmaki Makaurau	Tāmaki Makaurau Economic Climate Change Risk Assessment	Ngā whārangi katoa
Te āhua o te āwhina a te mahere urutaunga ā-motu tuatahi a Aotearoa i a ngāi Māori kia urutau ki ngā pānga o te āhuarangi hurihuri	Ngā ngohe āhuarangi mō ngāi Māori: Te mahere urutaunga ā-motu	Ngā whārangi katoa



Ngā Tohutoro

Wāhanga	Kōwae Ako	Ngā Tohutoro
Kupu Whakataki		Te Tari Tiaki Pūngao (2021). Climate Change and New Zealand Business: Nov 2021: eeca.govt.nz/insights/eeca-insights/climate-change-and-new-zealand-business Sustainable Business Council (2024). SBC Guide: Measure, reduce and report on your business's carbon footprint: sbc.org.nz/wpcontent/uploads/2024/06/SBC-Guide-Measure-reduce-and-report-on-your-business-carbon-footprint.pdf Te Manatū Mō Te Taiao (2021). He kupu ārahi mō te aromatawai tūraru huringa āhuarangi ā-rohe Assessments: environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments Te Manatū Mō Te Taiao (2022). National adaptation plan: environment.govt.nz/publications/aotearoa-new-zealands-first-national-adaptation-plan Te Manatū Mō Te Taiao (2022). Ngā mahi āhuarangi mō ngāi Māori: Te mahere urutaunga ā-motu: environment.govt.nz/publications/climate-action-for-maori-the-national-adaptation-plan
	Ngā painga o te urutau	Queensland Government (n.d). Climate Change Risk Management Tool for Small Businesses in Queensland: qld.gov.au/data/ass-ets/pdf/file/0026/132398/ccrmt-businesses-full.pdf Business.govt.nz (n.d). Te whakamahere auroatanga me te pā whakarere: business.govt.nz/risks-and-operations/planning-for-the-unexpected-bcp/continuity-and-contingency-planning
	Ngā tūāpapa o te āhuarangi hurihuri	The Intergovernmental Panel on Climate Change (IPCC) (2021). Summary for Policymakers: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf Manaaki Whenua (2021). He huringa ā huarangi he huringa ao: a changing climate, a changing world: landcareresearch.co.nz/assets/researchpubs/He-huringa-ahuarangi-he-huringa-ao-a-changing-climate-a-changing-world.pdf Ministry for Environment (2021). National Climate Change Risk Assessment: https://www.landcareresearch.co.nz/assets/researchpubs/He-huringa-ahuarangi-he-huringa-ao-a-changing-climate-a-changing-world.pdf NIWA (2020). Auckland region climate change projections and impacts: knowledgeauckland.org.nz/publications/auckland-region-climate-change-projections-and-impacts-revised-september-2020 Tātaki Auckland Unlimited (2021). Tāmaki Makaurau Economic Climate Change Risk Assessment: https://knowledgeauckland.org.nz/publications/auckland-region-climate-change-projections-and-impacts-revised-september-2020 Ministry for Environment (2021). A Guide to Local Climate Change Risk Assessments: environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments Ministry for the Environment (2022). Climate action for Māori: The national adaptation plan: environment.govt.nz/publications/climate-action-for-maori-the-national-adaptation-plan NIWA (2020). Climate change and possible impacts for New Zealand: niwa.co.nz/climate-change-information-climate-solvers/climate-change-and-possible-impacts-new-zealand Tātaki Auckland Unlimited (2021). Tāmaki Makaurau Economic Climate Change Risk Assessment: knowledgeauckland.org.nz/publications/tamaki-makaurau-economic-climate-change-risk-assessment
	He tirohanga ao Māori	Manaaki Whenua (2021). He huringa ā huarangi he huringa ao: a changing climate, a changing world: landcareresearch.co.nz/assets/researchpubs/He-huringa-ahuarangi-he-huringa-ao-a-changing-climate-a-changing-world.pdf Ministry for Environment (2021). A Guide to Local Climate Change Risk Assessments: environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments Ministry for the Environment (2022). Climate action for Māori: The national adaptation plan: environment.govt.nz/publications/climate-action-for-maori-the-national-adaptation-plan Tātaki Auckland Unlimited (2021). Tāmaki Makaurau Economic Climate Change Risk Assessment: knowledgeauckland.org.nz/publications/tamaki-makaurau-economic-climate-change-risk-assessment
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Me mōhio koe ki ō tūraru	Te tautohu i ō tūraru me ngā arawātea	Manaaki Whenua (2021). He huringa ā huarangi he huringa ao: a changing climate, a changing world: landcareresearch.co.nz/assets/researchpubs/He-huringa-ahuarangi-he-huringa-ao-a-changing-climate-a-changing-world.pdf Ministry for Environment (2021). A Guide to Local Climate Change Risk Assessments: environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments Ministry for the Environment (2022). Climate action for Māori: The national adaptation plan: environment.govt.nz/publications/climate-action-for-maori-the-national-adaptation-plan Tātaki Auckland Unlimited (2021). Tāmaki Makaurau Economic Climate Change Risk Assessment: knowledgeauckland.org.nz/publications/tamaki-makaurau-economic-climate-change-risk-assessment
	Te aromatawai i ō tūraru	Manaaki Whenua (2021). He huringa ā huarangi he huringa ao: a changing climate, a changing world: landcareresearch.co.nz/assets/researchpubs/He-huringa-ahuarangi-he-huringa-ao-a-changing-climate-a-changing-world.pdf Ministry for Environment (2021). A Guide to Local Climate Change Risk Assessments: environment.govt.nz/publications/a-guide-to-local-climate-change-risk-assessments Ministry for the Environment (2022). Climate action for Māori: The national adaptation plan: environment.govt.nz/publications/climate-action-for-maori-the-national-adaptation-plan Tātaki Auckland Unlimited (2021). Tāmaki Makaurau Economic Climate Change Risk Assessment: knowledgeauckland.org.nz/publications/tamaki-makaurau-economic-climate-change-risk-assessment
Whakamaheretia, mahia, arotakea	Te whakatakoto i tāu mahere urutaunga	Business.govt.nz (n.d). Continuity and contingency planning: business.govt.nz/risks-and-operations/planning-for-the-unexpected-bcp/continuity-and-contingency-planning
	Te arotake i tāu mahere urutaunga	UK Climate Impacts Programme (UKCIP) (n.d). AdaptME toolkit: ukcip.org.uk/wp-content/PDFs/UKCIP-AdaptME.pdf