



Me mōhio koe
ki ō tūraru

KŌWAE AKO 4 TE TAUTOHU I Ō TŪRARU ME NGĀ ARAWĀTEA

E tōtika ai te whakamahere urutaunga, he mea whaitake kia mārama ki ngā tūraru whai hāngai ki te āhuarangi me ngā arawātea kei mua i tō pakihi. Ko tā tēnei wāhanga he ārahi i a koe mā te tukanga ki te tautohu i ngā pānga kino me ngā putanga whaihua ka puta mai pea e hāngai ana ki ngā mōrearea āhuarangi.



Ngā mōrearea āhuarangi, ngā tūraru me ngā arawātea

Ko ētahi tauira o ngā mōrearea āhuarangi (ngā mōrearea āhuarangi ōkiko rānei) ko ngā tūāhuatanga taikaha pēnei i ngā waipuke, ngā āwhā me ngā pakapaka, tae rā anō ki te āta pikinga ake o te pae moana. Ka whakamōrea pea ēnei mōrearea ki ō whakahaere i te pakihi, i te kaimahi, i te kiritaki me ngā huarawa. Waihoki, ka riro ēnei hei arawātea mō te auaha me te tupu.

Hei tauira, ahakoa ka whakamōreatia tētahi pokapū māra e te tūpono ka pā te tauraki ki ana rawa tupu, tērā anō hoki te tūpono ka whai huanga ia i tētahi kaupeka roa ake mō te whakatupu. Ka whaipanga hoki pea ia i te pikinga ake o te popono ki ngā tupu paretauraki.



Ki te whakahaere pakihi koe i Tāmaki Makaurau, ka māmā noa ki te kite mehemea ka pāngia tō pakihi e te waipuke, e ngā take mō te waipuke rānei. Ka kitea hoki e koe ngā rautaki ki te whakarite i tō papanoho. Torotoro atu ki te Mātai Waipuke o Tāmaki Makaurau.



Ngā tūraru whakawhitinga me ngā arawātea

Ara ake ai ngā tūraru whakawhitinga me ngā arawātea i te mea e whakawhiti ana te pāpori ki tētahi ōhanga tukuwaro-iti. Ka taea ēnei te āia e ngā kaupapahere me ngā uruhi waeture, te hangarau me ngā panonitanga māketē, ngā panonitanga rānei o ngā whanonga, o ngā tōmina rānei o ngā kiritaki.

Hei tauira, ko tētahi tūraru whakawhitinga pātahi ki ngā SMEs katoa ko te pikinga ake o te utu ikiiki i ngā rawa whāurunga ki ngā rāngai katoa nō te mea e piki ake ana te utu kōhinu. Ko tētahi arawātea whakawhitinga pea ko te pikinga ake o te popono kiritaki ki ngā hautaonga tukuwaro-iti.

Ahakoa kāore tēnei e kōrerotia i tēnei aratohu, nō te mea e aro ana tēnei ki ngā tūraru ōkiko i tētahi āhuarangi whakarerekē, ka hiahia pea koe ki te whakaaro ki ngā tūraru whakawhitinga hei wāhanga i tō whakamahere whānui mō anamata.

Te tautohu i ō tūraru me ngā arawātea



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Te tautohu i ngā tūraru arorangi

Ki te tautohu i ngā tūraru whai hāngai ki te āhuarangi me ngā arawātea, whakaarohia ka pēhea ngā mōrearea āhuarangi e pā arorangi atu pea ki ētahi wāhanga mātuatua e rua i tō ara uara:



1. Ngā kaimahi me ngā kiritak

Tautohungia ngā tūraru ki te hauora, ki te haumarū, ki te oranga hoki o ō kaimahi me ō kiritaki ka puta mai whai muri i ngā mōrearea āhuarangi pērā i te wera taikaha me te waipuke. Ko ētahi tauira pea o ēnei ko ngā mate pēnei i te mate pūwera, i ngā wharanga rānei ki te hunga whaipānga matua.



2. Ngā huarawa me ngā tūāhanga

Tautohungia ngā tūraru ki ngā huarawa me te tūāhanga e whaitake ana ki ngā whakahaerenga i tō pakihi, tae atu ki ngā hanga whaitake ōkiko, ngā taputapu me ngā utauta. Aromatawaingia te whakaraerae o ēnei huarawa ki ngā mōrearea āhuarangi pēnei i te waipuke me te piki haere o te pae moana.

Te tautohu i ngā tūraru tītaha (whāurunga/kaiwhakarato)

Ko ngā tūraru tītaha he tūraru kāore i raro i te mana whakahaere, te mana rangatira rānei o tō pakihi. Hei tauira, pohewatia ka whakakinotia ngā whakahaere o tētahi kaiwhakarato e whakawhirinakitia ana e tō pakihi ko te āwhā te take. Ko tō ngoikore ki te whiwhi i tēnei rauemi matua ka pā arorangi atu ki tō pakihi mehemea kāore e taea e koe te kimi i tētahi atu kaiwhakarato i te wā e matea ana. Ko ētahi atu tauira o ngā tūraru tītaha ko ngā haukotanga ka pā ki ngā ratonga mātuatua pēnei i te ipurangi me te hiko, tae atu ki ngā pikinga ake o ngā utuhoko inihua.

Te tautohu arawātea

I tua atu i te tautohu tūraru, me kakama hoki ki te tautohu i ngā arawātea pitomata mō tō pakihi kia momoho noa i tētahi āhuarangi whakarerekē. Anei ētahi tauira e rua:



Te matakite i ngā ia ahumahi

Kia rite mō ngā panonitanga ahumahi mā te matakite i te āhua e waihangā ana ngā panonitanga i te āhuarangi i ngā popono hōu i te māketē, e panoni ana rānei i ngā tōmina o ngā kaiwhakapeto. Hei tauira, ka whakapikingia ake pea te popono ki ngā hautaonga tautaiāo me ngā ratonga mā te whakapiki ake i te tūoho.



Te whakamahi whāomo i ngā rauemi

Whakatōmenehia ngā arawātea ki te whakaheke utu me te whakarei ake i te whāomotanga mā ngā tikanga toitū, pēnei i te penapena pūngao me te wai, te whakaiti i te para me te hangaruatanga. Mā te kauawhi i ngā puna pūngao whakahou ka taea ngā huanga wāroa te whakaputa mō tō pakihi.

Te tautohu i ō tūraru me ngā arawātea



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Ngā tirohanga Māori ki ngā tūraru me ngā arawātea

Mō ngā pakihi e puritia ana e ngāi Māori me ngā hapori, e whakaaweawe ana ngā uara ahurea me ngā hononga ki te whenua me te whakapapa i ngā whakaaro ki ngā tūraru me ngā arawātea. Ko ngā āhuatanga ka tautohua e SME Māori hei āhuatanga 'mōrea' ka whārahi atu i ngā māharahara whakahaere o te wā tonu nei, ā, ka pā atu ki ngā whakaarohanga whānui ā-ahurea.

Whakaarohia pēhea te āhuarangi hurihuri e pā atu ai pea ki ngā uara ahurea e hāngai ana ki tō whakahaere. Tērā pea ka hono atu ēnei ki ngā uara i rārangitia i a Kōwae Ako 3.

Mā te āhukahuka i te whātuitanga o ngā āhuatanga ka noho mōrea e ai ki tā te mātauranga Māori ka taea pea te āwhina ki te whakakaha ake i tō whakamahere urutaunga mā te whai i tētahi tirohanga torowhārahi ake.

Mā te whakauruuru i ēnei tirohanga ki tō whakamahere urutaunga, ka taea e koe te whakarite e kauawhiawhi ana, e manawaroa ana, e hāngai ana anō hoki ō rautaki ki ngā uara o te katoa o te hunga whaipānga.



Ngā tohu taiao

He maha tonu ngā puna mātauranga e taea ana te āhei atu ki te āwhina i a koe ki te whakaawe i āu ake tikanga pakihi, me te ahunga anō hoki.

He momo pūtaiao ā-ringa, whai wheako anō hoki te maramataka (arā, te maramataka Māori) – e takea ana ia i te mātakitaki i ngā whetū, me te marama, me ngā mata o te marama – ka taea hoki ēnei e koe te whakamahi hei whakatakoto i ngā tūraru pakihi me ngā arawātea.

Mō te urutaunga āhuarangi tērā tētahi arawātea ki te whakaaro i tētahi huarahi e whai whakaaro ana ki ngā tūtohu taiao tuku iho e takea ana i tēnei puna mātauranga. Hei tauira, i ētahi rohe iwi ka tohua te tīmatatanga o te huarere taikaha i te koekoe a ngā kārearea i tētahi rangi paihurarere. I ētahi atu iwi, ka mōhio rātou ka tae mai te āwhā ina kite atu rātou i ngā pūkeko e piki ake ana ki tētahi papa tairanga ake. Mō ngā huanga kai me te nui o te māpua me ngā whakahaere i te hauhake, ki tō ētahi iwi orotau kia puāwai mai ētahi rākau, kua rite ētahi kai moana kia tīkina atu. Ko ētahi iwi ka āta mātaki i te wāhanga o te rākau ka puāwai tuatahi mai hei tūtohu i te nui o te huanga kai e tīnga ana.

Te tautohu i ō tūraru me ngā arawātea



Te taputapu tautohu tūraru me te arawātea whai hāngai ki te āhuarangi

Whakamahia tā mātou taputapu tautohu tūraru me te arawātea whai hāngai ki te āhuarangi hoki ki te tautohu i ōu ake tūraru whai hāngai ki te āhuarangi me ngā arawātea. Kua whakakā takamua mātou i tēnei taputapu ki ngā mōrearea āhuarangi mātuatua hei āwhina i a koe ki te tīmata.

Me mōhio koe
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Mōrearea āhuarangi	Kua whai wheako kē koe ki ngā pānga o tēnei mōrearea i mua?	Mehemea āe, he aha ngā pānga ki tō pakihi?	Te ara o te mōrearea āhuarangi i anamata	E whakaaro ana koe ka pāngia tō pakihi e ēnei mōrearea i anamata? Mehemea āe, tuhia mai ngā pānga huri noa i te ara uara o tō pakihi			He aha ngā arawātea pitomata ka whakaputaina mai e tēnei mōrearea?
				Ngā kaimahi me ngā kiritaki	Ngā huarawa me ngā tūāhanga	Ngā whāurunga me ngā kaiwhakarato	
Ngā pakapaka 	Āe, i te horopaki o tētahi pakihi ahumāra iti i te tonga o Tāmaki Makaurau	kua pā te mate pūwera taikaha ki ngā kaimahi i a rātou e mahi ana ki waho i roto i ngā marama raumati i 2024	Ka piki ake te auau, te roanga me te kaha o ngā pakapaka	Āe, ina hoki rā ka auau ake, taikaha ake hoki ngā pakapaka, he nui ake te tīnga o ngā kaimahi kia rongō ki ngā pānga taikaha o te mate pūwera, pērā i te mate pāwerawera.	Tērā pea me nui ake te whakatikatika i ētahi tūāhanga nō te mea ka tere ake pea te tauheke, ko te pēhinga i te pūwera te take.	Āe, nō te mea tērā pea ka pā kinotia ētahi huanga e te mate pūwera, me te aha, e kore pea ērā e ora i ngā āhuatanga mahana ake. Tērā pea ka whakararutia i te pikinga o ngā utu o ngā whāurunga ki te whakahaere i ngā whakahaere kīrearea nō te mea kua piki ake te nui o ngā kīrearea me ngā mate e ahu mai ana i ngā pāmahana mahana ake. Ka piki ake ngā matea wai	Mā ngā āhuatanga mahana ake, me ngā kaupeka roa ake mō te whakatupu kai, ka nui ake pea te whakaputa mai i ngā huanga
Ngā ahiniwha 			Ka piki ake te auau o ngā ahiniwha				
Waipuke 			Ka piki ake te auau me te korahi o te waipuke				
Te whakaparawhenua ā-tai me te pikinga ake o te pae moana 			Te whakaparawhenua ā-tai me te pikinga ake o te pae moana				
Ngā āwhā 			Ka heke iho te auau, engari ka ngoto ake ngā āwhā				
Te tauraki 			Ka heke iho te auau, engari ka ngoto ake te tauraki				
Ngā Horowhenua 			Ka piki ake te auau o ngā horowhenua				

Te tautohu i ō tūraru me ngā arawātea



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Te tuhi i ngā tauākī tūraru

Ko tā ngā tauākī tūraru he whakarato i tētahi huarahi mārama, popoto hoki ki te tautohu i ngā tūraru me ngā pānga. Whakamahia tā mātou taputapu tauākī tūraru ki te whakariro i ō tūraru i tautohua e koe hei tauākī tūraru:

- Whakaritea he tau ki ia tūraru, ki ia tūraru, e ngāwari ai te tautohu.
- Tāruatia te mōrearea, te ara mōrearea, te āhuatanga ara uara me te pānga tūraru i tā mātou taputapu tautohu i ngā tūraru me ngā arawātea whai hāngai ki te āhuarangi.
- Whakatīrewatia te tauākī tūraru mā te tīmata ki te mōrearea me tōna ara hāngai, me whai hoki ko te pānga wawe tonu me te pānga wāroa ki tō pakihi

Taputapu tauākī tūraru

Tuakiri Tūraru #	Mōrearea āhuarangi me te ara	Āhuatanga ara uara	Pānga	Tauākī tūraru
1	Ka piki ake ngā pakapaka	Ngā kaimahi	Ka rongo ngā kaimahi i te mate pūwera	Ka piki ake ngā pakapaka e whakamate pūwera ana i ngā kaimahi, ko te tukunga iho ko te heke iho o te māpua kaimahi i ngā haora awatea.
2				
3				
4				
5				

Te tautohu i ō tūraru me ngā arawātea



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Tēnā, āta huritaongia

Mā te whai whakaaro ki ēnei take ka nui tō mārama ki ngā kōrero i tēnei kōwae ako.

- Kua tautohua e koe ngā pānga o te wā nei, o nakuanei rānei ki tō pakihi i te āhuarangi hurihuri?
- E mārama ana koe ka pēhea ia mōrearea āhuarangi, ia mōrearea āhuarangi, e matapaetia ana ka panonihia i tētahi taumata tiketike?
- Kua tautohua e koe ngā tūraru whai hāngai ki te āhuarangi me ngā arawātea mō ō kaimahi me ngā kiritaki?
- Kua tautohua e koe ngā tūraru whai hāngai ki te āhuarangi me ngā arawātea mō ō whāurunga me ngā putanga?
- Kua tautohua e koe ngā tūraru whai hāngai ki te āhuarangi me ngā arawātea mō ō huarawa me ngā tūāhanga?

Mō te roanga atu o ngā pārongo

Kei te hiahia ahau he pārongo anō e pā ana ki...	Rauemi	Whārangi
Te āhua o te huringa o te āhuarangi huri noa i Aotearoa	Arotakenga Tūraru mō te Huringa Āhuarangi o Aotearoa¹⁶	37
Te āhua o te panonitanga o te āhuarangi huri noa i Tāmaki Makaurau	Tāmaki Makaurau Economic Climate Change Risk Assessment	8
Mehemea rānei taku pakihi me ngā tūāhanga hāngai e whakaraerae ana ki te waipuke	Mātai Waipuke a Te Kaunihera o Tāmaki Makaurau	Ngā whārangi katoa



¹⁶ Ka whakaaturia e tēnei pūrongo ngā kitenga o te Aromatawai Mōrearea āhuarangi hurihuri tuatahi o Aotearoa (NCCRA). Ko tā te aromatawai tūraru he whakaatu i tētahi matapae ā-motu mō te āhua o te pānga o ngā mōrearea whai hāngai ki te āhuarangi ka pā pea ki Aotearoa

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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	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