Climate change, NIWA says, is "caused by increased concentrations of greenhouse gases in the planet's atmosphere". The effect of greenhouse gases was discussed as early as 1896, when Swedish scientist Svante Arrhenius noted extensive coal burning would increase greenhouse gases in the atmosphere. But it took until 1988, when the Intergovernmental Panel on Climate Change (IPCC) was formed, for climate change to be taken seriously globally. Some people still do not see the severity, and now our only home is faced with irreparable damage.

Taking action to reverse climate change is both a collective and individual responsibility for every person on the planet. However women, when taking action against climate change, face a number of obstacles due to the patriarchal nature of society. In some ways, these obstacles have created opportunities only women can take.

One of these opportunities women have is to use their purchasing power to buy more sustainably. Double Denim is a New Zealand consultancy and agency led by women who explain this concept. Women are the "dominant primary caregivers for children and the elderly" and so do not just buy for themselves. Women are also more likely to share on social media the brands they like, according to Double Denim. They hold a "multiplier effect" and decide on as much as 80% of daily purchases. If more women supported sustainable brands who use plastic-free packaging, for example, or who are committed to reducing their carbon emissions, this could lead to more people, and companies becoming environmentally aware. This is something Australian Natalie Isaacs has encompassed as part of her '1 Million Women' initiative. The aim is to get women to make little lifestyle changes that culminate in big

reductions in their carbon footprints, like buying fruit and vegetables without plastic packaging in a campaign called #leaveitontheshelf.

Everyone has a carbon footprint (the amount of carbon dioxide, a greenhouse gas, released into the atmosphere from a person's daily activities). Something that contributes to landfill waste and carbon footprints for females is their periods. Despite the fact periods are normal, they are not normalised, sanitary items can be expensive, and it is estimated up to 15 000 pads and tampons are used by a woman in their life. Pads and tampons contain a lot of plastic that can take centuries to break down. 99% of plastic is made from fossil fuels, a process which releases tonnes of greenhouse gas into the atmosphere. By switching to a menstrual cup instead, women save money and reduce their carbon footprint. Cups can last up to 10 years, equating to 0.4% of the plastic waste of pads or 6% of the plastic waste of tampons that would be used during this time. It may seem like a small change, but it can have a lasting impact.

A much more serious decision some women are now making as part of their fight against climate change is to not have any children. This is because some research from 2017 published in the Environmental Research Letters has shown that having a child in a developed country equates to an annual carbon footprint of 58.6 tonnes. However this remains a highly controversial topic. Other research done by Founders Pledge states having a child equates to only around 4 tonnes of carbon dioxide emitted per year when future government policies on climate change are taken into account. Regardless, it remains one way women can do something about climate change.

All these are great examples of ways to combat the effects of climate change in everyday life, but they are much more applicable to those who are middle class in a first world country than anywhere else. Negative consequences of a warming planet are not seen to the same extent there as they are in third world countries, lower socioeconomic areas or indigenous communities. These people often do not have access to the same resources and thus are much more vulnerable to the extreme weather climate change is causing. Mary Robinson, the former President of Ireland and current President of the 'Mary Robinson Foundation – Climate Justice', includes some of these stories in her book 'Climate Justice'. In places like these, Robinson writes, women are the "backbones of their communities" and so see first-hand the damaging effects climate change has on their communities' livelihoods. Therefore they are often the ones who must educate themselves and others on climate change.

The majority of the people written about in 'Climate Justice' are women who have become activists at a grassroots level with significant influence. Women like Constance Okollet, a small scale farmer in eastern Uganda whose village has suffered from erratic weather since 2000. Constance attended a meeting held by Oxfam about food insecurity in 2009, and it was at a second Oxfam meeting that she first learned of climate change, and how developed countries' emissions were part of the reason for the erratic weather she experienced. Constance knew they were unlikely to receive help from afar, so she did it herself. Realising the importance of tree planting to stop soil erosion, she got her local council to pass a law that for every tree cut, five new trees are planted. Since then, Constance has attended climate summits all over the world to speak as a "climate change witness". A United Nations Environment Programme (UNEP) report from 2011 noted that women working in agriculture in Africa are "above 50%" of the workforce and "play a key role in adaptation efforts...as the climate changes". But the

inequality between women and men in these situations is vast. Women will do the majority of the farming while being expected to collect water and feed their families. For Constance, this meant long days, walking tens of kilometres, starting at 5 am. This displays the strength women have, disproving sexist stereotypes once again. Women have a voice, and they will use it.

Sharon Hanshaw is an African American woman whose low income East Biloxi area was hit hard by Hurricane Katrina. Her salon business and five thousand homes in the community she lived in were demolished by the hurricane. Low income households who rented their homes were not eligible for the assistance from the state government as it was only for homeowners. This meant her already struggling community suffered even more, and Sharon says that out of this "women bear the brunt of climate change". Wanting to help, Sharon became a tireless advocate for these people as Executive Director of 'Coastal Women for Change'. Like Constance, Sharon's actions took her to international climate summits. Robinson calls her the "accidental activist" in her book, demonstrating women are more than capable of creating change. These are stories, though, that have a harsh truth: those already marginalised in today's society are more at risk to adverse effects of climate change, explaining why women are frequently amongst those who have made a conscious effort to resist it.

Like anything else, there is not merely one answer to "what can women do about climate change?". There are endless solutions, and just a few of them have been discussed above. Women might choose to use their purchasing power to buy sustainably, or take personal experience of the consequences of climate change, like Constance or Sharon, to help improve

this world. Yet, irrespective of their choice, women must also work to overcome the barriers of gender inequality in their pursuit of climate justice.

Due to the historically patriarchal system of society, half the population at most, (those who are male) have their voices consistently listened to. Oxford English Dictionary defines listen as "to pay attention to somebody/something that you can hear". The other half, females, are often only heard at most. There is a difference. What if everyone was listened to? Today, people's daily lives around the world have been thrown into disarray because of the COVID-19 pandemic. A quick Google search reveals numerous articles all arguing women leaders, including New Zealand's own Jacinda Ardern, have had some of the best responses to this crisis. Women have had a long, and continuing, battle for equality. Being on the fringes of society has meant women must have more determination, more innovation and more resilience to succeed, and these deeper qualities show in women who do something about climate change.

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