

# Level 3 90831

## NCEA Education for Sustainability (EFS) 2018

### AS 90831: Analyse the impact that policies have on a sustainable future (5 credits)

Achievement	Achievement with Merit	Achievement with Excellence
Analyse the impact that policies have on a sustainable future.	Analyse in depth the impact that policies have on a sustainable future.	Critically analyse the impact that policies have on a sustainable future.

Overall level of attainment for 90831

<ul style="list-style-type: none"> <li>Analyse the impact that policies have on a sustainable future.</li> <li>Identifies the forces that have shaped at least two policies.</li> <li>Explains the relationship between these policies and the aspects of sustainability.</li> <li>Draws conclusions based on evidence and examples on the impact of the policies on the aspects of sustainability.</li> <li>The impact on policies will be based on an analysis of the practices to implement them.</li> </ul>	<ul style="list-style-type: none"> <li>Analyse in depth the impact that policies have on a sustainable future.</li> <li>Uses at least two forces per policy, e.g. political, cultural, environmental, social, and/or economic.</li> <li>Explains how forces have shaped at least two policies in the context of sustainability.</li> <li>Evaluates in depth the extent to which these policies achieve their intended outcomes.</li> <li>Where possible includes Māori Concepts and Values relating to environment, which may vary between hapū and between iwi.</li> </ul>	<ul style="list-style-type: none"> <li>Critically analyse the impact that policies have on a sustainable future.</li> <li>Analysis includes discussion on the ability of both policies to achieve its intent.</li> <li>Analysis provides insight on the extent to which both policies achieve a sustainable future.</li> <li>Analysis includes Māori Concepts and Values relating to environment, which may vary between hapū and between iwi.</li> </ul>
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# **NZ Policy Implementation And Sustainability**

Level 3 EFS 23/10/18

AS90831

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Key Words:

New Zealand, sustainability, social, cultural, environmental, economic, implementation, MPI, EECA, animal welfare, renewable energy, reputation, clean, mauri, kaitiakitanga.

## **Section 1: Executive Summary:**

This report will be a look at/analysis of the relative impacts from the implementation of two policies (in New Zealand) on sustainability. The two policies of discussion are that of The Animal Welfare Act (1999) and the Energy Strategy And Policy for 2011-2016.

### **Section 1.1: Outline Of Each Policy:**

The Animal Welfare Act, created in 1999 by the Ministry Of Primary Industries (MPI) is based upon the facilitation to the management of animal welfare policy and practice in New Zealand. "MPI promotes policies for the humane treatment of animals and is a key participant in the ongoing animal welfare debate." [1] for the welfare and humane treatment of animals.

This policy is put into effect through the use of practices such as: providing penalties for ill-treatment of animals, forcing animal owners to allow their animals to show natural patterns of behaviour, providing adequate shelter, food and water and forcing animal owners to minimise unnecessary pain or distress when handling in a physical manner.

The second policy in which I shall discuss is that of the Energy Efficiency and Conservation Authority (EECA) Energy Strategy And Policy for 2011-2016. The policy is created through the concept of using New Zealand's natural environment to the best of its abilities in ways for us to create clean green/renewable energy, this is to benefit us a society and the New Zealand economy. "The strategy focuses on four priorities to achieve that: diverse resource development; environmental responsibility; achieving efficient use of energy; and promoting energy security and affordability..." [2] These two policies represent New Zealand in a good light. This is sustainable for our economy as the implementation of these two policies creates clean green association with New Zealand, supposedly attracts tourists and creates better export.

## Section 2: Policy Development:

After researching the first policy [Animal Welfare Act], it is clear to me that the policy was derived from two forces in particular; one being ethics and the other being a want for good reputation of agricultural products.

Due to my research into seeing if there is a correlation between happy animals and good products, I am able to conclude that this does exist. I had found many sites to back this information up, but the site I chose is The Atlantic, in which it stated; "When the animals are subjected to manhandling, fighting in the pens, and bad stunning techniques, the fright and stress causes a rapid breakdown of muscle glycogen. This lightens the color of the meat and turns it acidic and tasteless, making it difficult to sell, so it is usually discarded." [3]

New Zealand is a country that heavily relies on exported goods, especially agricultural products. One example of this is the dairy industry where it is worth \$14 billion per year. The dairy industry is crucial for New Zealand's economy along with the future sustainability of the country.

For this industry to thrive there must be policies in place to support it producing good products/having a good reputation.

The Animal Welfare Act was created through the use of conscious beliefs with the views/beliefs of how animals deserve/should be treated. This falls under social and cultural sustainability. The second force that shaped this was the need for good export/reputation, which falls under economic sustainability. As I had already established, agricultural products provide major income for the country. For New Zealand to be sustainable we need cash flow, the MPI knows this, so this is why they want New Zealand to be producing the best products possible.

These forces shaped this policy within the context of sustainability by being based off of three aspects of sustainability; social, cultural and economical.

The first force (ethics/beliefs) shaped this policy in the context of sustainability by being based off of the sustainability aspects of social and cultural. These aspects are strongly interlinked with the policy as it is socially/culturally unacceptable to treat animals in-humane and it is apart of the Maori belief of mauri; "Treating every living thing with respect." [4]

The second force (good export) shaped this policy in the context of sustainability by being based on the economic aspect of sustainability. The economic aspect of sustainability has a huge part to play in this policy as exported goods directly represent New Zealand and provide income for the country - the MPI want the best

possible products to be exported. This creates a good image for the country/ its products meaning more people will want to buy New Zealand products, along with potentially attracting tourists which also contributes to the national economy.

On the other hand, we have the EECA Energy Strategy And Policy for 2011-2016. To me, it seems clear the two forces that shaped this policy was the want to become more environmentally and economically sustainable and the want to keep progressing New Zealand's clean and green image/reputation.

In 2011 when the policy was put into action, the EECA said their policy would be "achieved through the environmentally-responsible development and efficient use of the country's diverse energy resources." [5] To me, this statement links directly into the two main forces that shaped this policy. This is because it is talking about using New Zealand's resources to create energy and developing energy resources which relates to improving New Zealand's image/reputation.

The first force (the want to become more environmentally and economically sustainable) shaped this policy in the context of sustainability as the main goal of the policy was based around becoming more environmentally and economically sustainable. The aim is to create more clean energy to create competitive prices for energy and to export it.

The second force (progressing New Zealand's clean and green image/reputation) shaped this policy in the context of sustainability as it provides an incentive to keep progressing technology so New Zealand can be at the forefront of the world, in terms of being clean and green. Having a clean green image/reputation means that other countries may want to model off of us, this promotes New Zealand in a positive light and can contribute to more tourism which means New Zealand is able to enjoy more economic benefit.

All in all, I am finding this interesting as I am already starting to see similarities between the two policies. A key example of this is how they are set out to better the image of New Zealand. Both policies have underlying Maori concepts; Animal Welfare Act being Mauri and EECA Energy Strategy And Policy being Kaitiakitanga.

### Section 3: Policy Implementation:

After doing some further research regarding the periods before and after the EECA Energy Strategy And Policy was introduced I found data in which I made into a table. See Below: (measurements in GWh.) [6]

Year	Thermal	Geothermal	Wind	Hydro	Total	Renewable %
1975	1,926	1,350	-	16,497	20,120	90%
1980	1,972	1,206	-	19,171	22,713	91%
1985	6,572	1,165	-	19,511	27,713	76%
1990	6,028	2,011	-	22,953	31,459	81%
1995	5,442	2,039	1	27,259	35,250	85%
2000	10,454	2,756	119	24,191	38,069	73%
2005	14,229	2,981	608	23,094	41,452	66%
2010	11,185	2,981	1,621	24,493	43,413	74%
2015	8,285	7,383	2,334	24,303	42,928	81%

In the table, it shows in 2010 74% of electricity was renewable. Due to my research, I am now able to conclude that the way in which the EECA has gone about fulfilling their policy to create a greener New Zealand is working. I found a figure on the Ministry of Business & Employment website saying that approximately 81% of electricity comes from renewable sources in 2016. [7]

This improvement is good for our society and the future sustainability of the country. This positively affects all aspects of sustainability by contributing to a cleaner environment - better air quality etc, protecting the environment, fewer carbon emissions along with the ability to create revenue.

### **Section 3.1: Policy Implementation - How:**

Providing penalties for ill-treatment of animals, forcing animal owners to allow their animals to show natural patterns of behavior, providing adequate shelter, food and water, forcing animal owners to minimise unnecessary pain or distress for animals.

Applying efficient technology to enhance economic growth through increased productivity, Reduce greenhouse gas emissions from energy, improve energy security by reducing energy demand, including for imported sources of energy are all practices that have been developed from the policies.

These practices are all relevant to the purpose/intent of the policies because the practices are the efforts to put each policy into action.

The MPI can measure their policies success through positive inspections where it shows animals are being treated to at least the minimum standard set out in the act, I assume that the MPI would find it a lot harder to measure their policies success accurately compared to the EECA. The EECA would get to observe more accurate stats to measure their policies success; therefore they are able to see more conclusive results than the MPI. The MPI requires a lot of human interpretation, this could affect the percentage of results in which people/organisations are abiding by the policy/act.

Although I can imagine there are strict criteria to whether people/organisations are living up to the policy/act, human interpretation is not always very consistent as it can vary quite easily, especially when there would be people trying to deceive the inspector(s).

In regards to the EECA's policy, it can be seen that the implementations of their practices can be seen as a success for creating a positive impact on the environment. After implementing their policy they managed to raise the amount of electricity coming from renewable sources by 7% within six years.

They achieved this through the use of using New Zealand's natural environment in ways that were environmentally and economically sustainable to create clean green/renewable energy. Having already looked at the forces shaping this policy, I am now able to analyse the implementation; The use of being able to create an abundance of renewable energy is a very valuable element New Zealand can boast. By doing this we lower carbon emissions, we take advantage of the environment and can create competition in the electricity market. This heavily plays into New Zealand's sustainability.



By having lower greenhouse gas emissions means we are able to breathe better air and create competition in the electricity market, which is much needed, as the price of living is going up in New Zealand. For instance, the average salary in Auckland is \$58,371. [8] Even though this is based in New Zealand's most expensive city, the cost of living in many other places (in New Zealand) tends to be expensive too. Having lower electricity costs means people have more control over their money, this can increase happiness ultimately leading to more productivity with people in the workforce. With more businesses being productive this can equate to them making more profit which often results in the government being able to tax more (economic effect). To back up my statement I found a quote by the Forbes website in which they stated: "Happy employees are also good news for organizations: The stock prices of Fortune's "100 Best Companies to Work for" rose 14% per year from 1998 to 2005, while" companies not on the list only reported a 6% increase." [9]

If the EECA continue down the track they are on and can soon get New Zealand's electricity to be 100% sustainable, governmentally owned renewable energy sources could provide free electricity and instead, they could charge a tax to those who gain electricity for free. If this Idea was to come into fruition, New Zealand would receive much more tax dollars than ever, this money could be used to maintain the resources and further promote sustainability in other areas of the country. This would also create huge competition for other electricity companies meaning they would have to lower their prices - this would make the cost for electricity considerably lower price, in which it would benefit the poor and working class sectors of New Zealand citizens especially. Helping them could contribute to a nice life and also being more productive in the workforce. However, in saying this, there is the possibility that some electricity companies will not make as much profit and decide to lay off employees. This outcome would not be favourable.

In regards to the Animal Welfare Act, if inspections conclude that if someone/businesses fail to meet the minimum animal welfare requirements stated in the act, this can result in fines and/or prosecution. [10] Being fined means the government/organisation gains money. However, if someone gets sent to prison, this can be bad for the taxpayer dollar, as this means they are essentially paying for people to be locked up, looked after and fed etc.

#### **Section 4: Conclusion:**

I have found it interesting to look at the similarities for these policies. They cover all aspects of sustainability, in which they contribute to a sustainable future by providing economic gain for the country. The Maori underlying principles of mauri and kaitiakitanga are strongly interlinked with these policies.

Sustaining a quality reputation in international trading markets is vital for our economy. From 1993–2013 primary sector exports in New Zealand grew by 47% and over 70% of New Zealand's merchandise exports come from primary industries. According to the New Zealand Economic Institute of Research (NZEIR) in 2016 these following agricultural sectors created \$13.361 billion (Dairy), \$6.579 million (Meat) and \$85400 (Wool export). They also stated how the dairy industry contributes \$7.8 billion to New Zealand's GDP - (3.5%) to New Zealand's total GDP [11] Through the use of the MPI's policy promoting animal welfare contributes to a sustainable future by improving the reputation of New Zealand products, which creates more money for the country. The policy is not only sustainable, but based on sustainable ethics/morals too.

Through the dairy industry providing \$7.8 billion in revenue to the New Zealand economy, this heavily contributes to the present state and future sustainability. With more money, New Zealand can invest in its resources and other industries such as tourism (New Zealand's second largest industry). With more money New Zealand can invest into better living conditions and making its people happier (social), with happier people creates a better reputation and more productive workforce, which helps businesses succeed; this then creates the government income through taxation (economic). By investing in social sustainability New Zealand makes its people happier, builds a better reputation, creates a hype where people want to move here (bringing money and potentially business) and gives us more credibility when compared to other countries and in international trading markets.

To make a connection between the two policies, I have also found that through the use of the animal welfare policy - creates a good export reputation. The money made through the exportation of our agricultural products can support the EECA's environmental policy by being able to invest in renewable energy technology.

With more money, New Zealand can invest into the EECA's renewable energy policy, by investing in this means we can make an abundance of energy, which can be sold or stored in case of a natural disaster. Through the use of renewable energy production growing in New Zealand means that there would be a want to maximise how efficient/well energy can be produced. We could then lead the way in renewable energy production across the world and countries would look to our model and then

we could begin to sell our technology. Selling our technology would mean more countries could switch to renewable energy - they could reduce greenhouse gas emissions and fight climate change. Fighting climate change would mean we could slow down rising sea levels, slow global warming, protect endangered species, maintain a good level of biodiversity and stop the oceans from becoming so acidic.

With the ocean becoming more acidic means that fish might start to die, this could result in a higher emphasis on agricultural or horticultural products; with an emphasis on this, it would heavily contribute to an unsustainable future as the agriculture industry is heavily unsustainable on a large scale and with horticulture means that more sprays will be used on crops. This dries out the land, gets blown and settles in communities and kills bees. The follow-on effect of bees dying means it would be harder to grow crops, resulting in a lower amount of food production and meaning that it would be harder to create agricultural products; farmers would have to buy lots of grains etc for their animals meaning that the price for grains and other crops becomes inflated and agricultural products become extremely expensive. Consequences of this could be starvation and ultimately death etc.

Even though the policies have the biggest impact on economic and environmental sustainability, they cover all the aspects, such as social and cultural too. Having actions to treat sentient beings well is morally sustainable, it also provides a platform for people to learn compassion through treating animals right, which can then be translated to interactions with humans and raising New Zealand's clean energy production, trying to lower electricity expenses and keeping our environment as clean as possible is good for the people.

Both these policies integrate Maori cultural beliefs through the concepts of mauri and kaitiakitanga. It is important to integrate culture into policies that affect the country, especially when the cultural beliefs are based on ideas that have the environment and its beings as a huge focus.

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## Merit Exemplar 2018

<b>Subject</b>	Education for Sustainability	<b>Standard</b>	90831	<b>Total score</b>	05
<b>Q</b>	<b>Grade score</b>	<b>Annotation</b>			
1	M5	<p>The candidate has provided enough evidence for M5 in this question, with a detailed explanation of how forces have shaped at least two policies within the context of sustainability. The candidate has used two forces per policy, and the impact that the policies have on a sustainable future has been analysed in depth.</p> <p>Reference has been made to Māori concepts and values relating to the natural environment.</p>			