

# LESSONS FROM A MELTING ICECAP

A guide for use of the film in classrooms

## Context for Use

*Lessons from a Melting Icecap* is a film designed as an introduction to the issues of climate change and oil dependence. It is intended to help students engage with the issues in a way that not only promotes understanding of the seriousness of the situation, but also empowers students to take real action in their own town.

For this reason, it's recommended that the film is used to kick-start a community-linked project around the issue of climate change & oil dependence. Possibilities include:

- a **research project**, with students looking at what climate change might mean for their community, & what actions can be taken locally to **mitigate** & / or **adapt** to climate change;
- an **action project**, with students taking an action to **mitigate** & / or **adapt** to climate change in their local area, in collaboration with the community;
- a **documentation project**, with students researching & telling the story of a local person or group taking action to **mitigate** & / or **adapt** to climate change.

## Mitigation and Adaptation

To avoid catastrophic climate change, the world's population needs to reduce greenhouse gas emissions rapidly. This is called **mitigating** climate change – reducing emissions to prevent climate change from happening, e.g. by increasing energy efficiency, & / or promoting low carbon (and less) transport, and community gardens etc. Unfortunately, because of lags in the climate system, even if all emissions were stopped tomorrow, the world will still experience significant climate change, which humans will need to **adapt** to, e.g. by installing infrastructure to prepare for droughts, storms & sea level rise.

## Links to the New Zealand Curriculum

Projects that engage students in research, action or documentation projects around climate change issues are in line with the Curriculum's **VISION** of young people **connected** to the land & their communities, & **actively involved** in creating a **sustainable social, cultural, economic & environmental future for our country**.

These projects are good vehicles for many of the Curriculum's **PRINCIPLES**, in particular those of **Community Engagement, Coherence, High Expectations, and Future Focus**.

Such projects assist students to develop and explore **VALUES**, particularly:

- Excellence** (aiming for a safe climate future in the face of challenges posed by climate change);
- Innovation, Inquiry & Curiosity** (thinking critically about our current lifestyles & their impact on the planet, exploring creative alternatives, reflecting on what those alternatives may look like in their own community);
- Equity, Integrity & Respect for Self, Others, & Human Rights** (understanding the disproportionately large impact of climate change on poor people & those in undeveloped countries, and acting ethically to mitigate these impacts);
- Community & Participation** (researching, designing & taking action to reduce the impact of climate change, in collaboration with communities);
- Ecological Sustainability** (promoting ecological sustainability through increased awareness of, & action for, a safe climate future).

- They will also be making use of the **KEY COMPETENCIES**:
  - Thinking** (linking greenhouse gas emissions & climate change to local and national consequences through research; critically analysing information gathered; using this knowledge to shape appropriate action);
  - Relating to Others & Participating & Contributing** (working with others to design a project / decide on shared values and priorities / take action as part of a community with responsibility not only at the local level but as New Zealanders & as global citizens);

**Using Language, Symbols and Text** (to communicate a complex scientific issue to a broad audience; constructing locally relevant messages in appropriate formats);

**Managing Self** (working as part of a group to set a goal, make plans & manage a project; building students' feelings of empowerment - their 'can-do' attitudes & self-motivation).

### Specific Assessment Links and Resources

The film's website [www.meltingicecap.co.nz](http://www.meltingicecap.co.nz) is a living hub for teacher resources around the film, & will be an ever-expanding database of examples of the film being used in schools across New Zealand, from Years 5 - 13, in many different subjects.

If you found the film useful in your classroom, or have climate change projects you'd like to share, please send details (Year Level, Subject, Assessment Standard links, additional resources, how it sat within a larger project, plus contact details, if you'd like the resource to be attributed to you) to me at [lessonsfilm@gmail.com](mailto:lessonsfilm@gmail.com). Your contribution, added to the website, will help strengthen the film's usefulness for other teachers.

### Year 5 - Year 10

The issue of climate change is a great opportunity for cross-curricular projects, especially at Senior Primary & Junior Secondary level. A climate change-focused action project like a community garden can be researched in Social Science & Science, designed in Maths & Technology, documented & promoted in English, Art & Information Technology.

### Year 11 - Year 13

Although there are many uses for the film throughout the senior curriculum, the Education for Sustainability NCEA Standards provide a particularly good framework for assessment of climate change-focused projects.

Visit [www.meltingicecap.co.nz](http://www.meltingicecap.co.nz) for examples of integration of the film and the climate change topic into other assessments. An electronic copy of this Guide is also available on the website.

### Links with Education for Sustainability NCEA Standards

**A research project** could be assessed using

- EfS Level 2 AS90811: Describe the consequences of human activity within a biophysical environment in relation to a sustainable future
- EfS Level 2 AS90815: Work cooperatively to develop and present a strategy or design for sustainability in response to a future scenario
- EfS Level 3 AS90829: Investigate the relationship between humans and a biophysical environment in relation to a sustainable future
- EfS Level 3 AS90832: Develop & justify a strategy for an organization that will contribute to a sustainable future.

**An action project** could be assessed using

- EfS Level 2 AS90810: Plan, implement & evaluate a personal action that will contribute towards a sustainable future
- EfS Level 3 AS90828: Evaluate a planned personal action that contributes toward a sustainable future

**A documentation project** could be assessed using

- EfS Level 2 AS90813: Describe values & associated behaviours in relation to a sustainable future

### Additional Climate Change Resources

TKI has a page dedicated to climate change resources: <http://efs.tki.org.nz/Resource-Links/Climate-change>

The global, youth-driven 350 movement (the local arm 350 Aotearoa: [www.350.org.nz](http://www.350.org.nz)) provides a fun, positive way for young people to engage with the climate change issue, & has a good science fact sheet:

[http://www.350.org/files/materials/350\\_science\\_factsheet\\_FINAL2.pdf](http://www.350.org/files/materials/350_science_factsheet_FINAL2.pdf)

Lacking on the TKI climate change resource page are links to whole community solutions (which are much more exciting for students than changing light bulbs!). A good place to start investigating whole community solutions in New Zealand is Transition Towns Aotearoa: <http://www.transitiontowns.org.nz/>