

GENERATION HYDRO

Year 2 - HASS

Teacher Guide: Electricity to homes - past and present

Tasmania's hydroelectric power scheme was carved out of the state's harsh interior, by ordinary people working in extraordinary conditions.

From the perspective of the twenty-first century, imagining life without electricity is not easy. But less than one hundred years ago homes were dominated by candles, kerosene lamps and gas lamps; open fires and wood-burning stoves; chip heaters, iron kettles and camp ovens. While electricity was already replacing gas for town lighting and providing motive power for mines, nearly all farms and factories relied on horses, steam engines, windmills and water power. As late as 1952, networked electricity was still to reach some districts in Tasmania.

Electricity in Tasmania - a brief history

- Between 1883 and 1916, a small number of Tasmanian companies and municipal councils operated individual power plants.
- The Hydro Electric Department was created by the Tasmanian Government in 1914.
- Two generating units were commissioned at Waddamana Power Station in May 1916, the first step in providing state-wide electricity.
- By the 1920s, hydropower was revolutionising Tasmanian farms, mills, mines and factories, but electricity was not yet widely available in homes.
- During the Great Depression and the Second World War labour, materials and equipment became scarce and work on Tasmania's hydro-electric scheme slowed.
- In 1940, having access to electricity for anything other than lighting was considered a luxury.
- A decade later most Tasmanian homes were fully electric, though many of the appliances we enjoy today were not yet available or invented.
- Today, Hydro Tasmania is Australia's leading clean energy business and largest generator of renewable energy.

- Every year, Hydro Tasmania produces about 9000 gigawatt hours of clean electricity from hydropower – enough to power about 900,000 Australian homes and small businesses.

Australian Curriculum

Learning Area HASS	Content Descriptions
AC9HS2K02	How technological developments changed people's lives at home, and in the ways they worked, travelled and communicated.
AC9HS2S01	Develop questions about objects, people, places and events in the past and present.
AC9HS2S04	Discuss perspectives related to objects, people, places and events.
AC9HS2S03	Interpret information and data from observations and provided sources, including the comparison of objects from the past and present.
General Capabilities	Critical and Creative Thinking, Personal and Social Capability, Literacy

Learning goals

Know:

- Homes have not always had electricity.
- Electricity has changed the way we live (cleaning, cooking, heating and lighting).

Understand:

- The beginnings of electricity in Tasmania.
- The importance of electricity in daily living.

Do:

- Compare past and present appliances used in homes (with and without electricity).
- Draw simple conclusions that electricity has changed the way we live.

Achievement standard

By the end of Year 2 students

Identify the effects of changes in technologies on people's lives.

Adjustments / strategies to include all students

	Enabling	Extending
Content:	As required expose students to language that will be used during the unit	Have students explore the history link of the Hydro Tasmania website and decide on one important sentence from each of the four sections: <ul style="list-style-type: none">• Powering Generations• Where it all began• Reinventing the Hydro• Part of the Tasmanian Community
Process:	Guide students through one-to-one teaching, flashcards, visuals or other strategies to suit particular student needs	Using open ended questions to consider how life might be without electricity i.e. what if we did not have electricity for...?
Product:	Invite students to represent what they know about electricity in a format of their choice	Have students design a Hydro Tasmania electricity poster for year 1 students

Assessment

Refer to *Options for assessment and extension* in each Lesson Plan

Evidence of student learning

- Students describe (oral, written or other representation) that electricity has changed the way we live at home.

Group reflection

Refer to *Elaborate and Review* in each Lesson Plan.

Teaching and learning resources

Hydro Tasmania resources

- [Hydro Tasmania Website – our history](http://www.hydro.com.au/about-us/our-history)
www.hydro.com.au/about-us/our-history

- [People of the Hydro](#)

www.youtube.com/watch?v=II2U-14_BA

It is recommended that teachers view these resources as background information and in order to summarise content of first five minutes that will be used to introduce the following lesson plan.

Research topics

- **Living before electricity**
- **Heating your home before electricity**
 - open fires, extra blankets, chip heaters
- **Food storage before electricity**
 - meat safes, cool pantries, preserving food by smoking, salting or drying
- **Cooking before electricity**
 - using a metal stove top over a fire, mixing ingredients by hand
- **Boiling and heating water before electricity**
 - using a billy can or a pot over the top of an open fire, chip heaters
- **Ironing before electricity**
 - charcoal irons, petrol irons
- **Laundry before electricity**
 - hand washing, washboards, manual washing machines
- **Lighting**
 - kerosene lamps, candles, fireplaces, gas lamps

Materials	Number
Smart board or projector	1
Internet connection	1
People of the Hydro online video	
Activity - Homes Past and Present	1 each

Feedback

If you would like more information or to provide feedback please contact our Education Coordinator at education@hydro.com.au