

www.forestlearning.edu.au

A teaching and learning resource on Australian forests and sustainability for years 3 –12



### Overview

Four main challenges for Forest Learning over the next 12 months:

- Continue to grow number of quality and engaging teaching resources that builds teacher confidence
- Continue to link all lessons to the <u>Australian Curriculum</u> and meet <u>www.scootle.edu.au</u> online resource requirements
- Continue to address misinformation around forestry, its production and environmental impacts
- Assist the industry to engage with schools to promote the www.forestlearning.edu.au website, lessons and the industry.
  - Between 8,000 and 10,000 hits per quarter
  - 7,000 on forestlearning database (predominantly teachers)



## Meeting them how?

- 1. Employing quality curriculum writers and educators to develop lessons at primary and secondary-science levels
- 2. Developing guidelines for resources based on research from 2012, feedback on current resources (audit conducted in 2013 seeing resources reduced from 200 to 32 on forestlearning) and Primary Industries Education Foundation of Australia feedback
- 3. Focus on individual lessons that build into Units of Inquiry
- 4. Leverage PIEFA relationship to ensure forestry well represented at conferences, publicity and future resources



### Resource Focus

Future direction with Australian Forest Education Alliance partners:

- 1. Plantations from forest to frame
- 2. Forest sustainability and regeneration (includes fire)
- Different land and different uses
- 4. Carbon storage
- 5. Wood in our everyday lives



## **AFEA Members**

#### AUSTRALIAN FOREST EDUCATION ALLIANCE

















### New Website



These educational resources provide insights into how Australian forests play a vital role in the provision of forest and wood products and environmental services for society. From how Australian forests deliver timber to produce renewable goods that many of us use on a daily basis, provide habitats for biodiversity and recreational spaces, and provide employment opportunities through active management operations that help sustain rural communities. To how forests help protect water quality through stabilising soils, and help combat global carbon emissions and air pollution through the storage of carbon in trees and wood products.

These resources have been developed by experienced educators inline with the Australian Curriculum and current pedagogical practices and supported by the members of the Australian Forest Education Alliance.

LATEST RESOURCES

## Searching

### Find a Resource

CURRICULUM CODE V

THEME V

SUBJECT V

YEAR ~

STATE V

SCOT V

TYPE 🗸

KEYWORD V

To filter the results, you can select search criterias from the above menu.

#### FILTERING BY THESE TAGS:

CLEAR ALL

FIND RESOURCES Q

#### **RESOURCE RESULTS:**









## **Forest Information**

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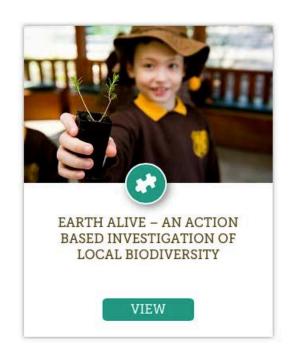
#### FOREST INFORMATION

#### Forests in Australia

Forests are ecosystems; a dynamic, constantly changing community of living things, interacting with non-living components. Forests are valued on social, environmental, cultural and economic factors, and are used, loved and appreciated by most people.

Forests in Australia cover approximately 125 million hectares or 16% of the Australian land mass, and include around 3% of the global forest area (DAFF, 2014). Forests are areas of land dominated by tree cover that can reach at least 2 metres height at maturity, and include all other living and non-living things within, such as animals, plants, soil and water.

We need forests. They provide wood and non-timber products and services, play a key role in the fight against climate change, make an important contribution to our economy through supporting regional communities, as well as providing excellent opportunities for recreation and tourism.



## Glossary

C

#### Cable logging

Logging method based on a skyline wire cable system, used where slopes are too steep for conventional logging machinery.

#### Canopy

The uppermost level of foliage formed by the branches and leaves of a tree.

#### Capacity

The ability to apply knowledge in problem solving processes and innovate to create change.

#### Captive carbon

Once C02 has been used by a plant the carbon will stay captive (or stored) in the plant until it decomposes, is burnt or breaks down.



### **National Excursions**

### Book a Forest Excursion

#### **BOOK A FOREST EXCURSION**

If you are in Tasmania:

Forest Education Foundation

The National Forest Learning Centre

The National Forest Learning Centre Hobart, is a purpose built forestry learning centre which allows schools to spend an hour or two investigating various aspects of forest ecology, forest science and forest management through a range of hands-on learning experiences developed by the Forest Education Foundation teachers.

However if you want to take a field trip the Forest Education Foundation (FEF Field Trips Along) can has a range of program and field trip opportunities available throughout Tasmania. All field trips, from lower primary to pre-tertiary, involve a wide range of practical activities and use of specialist equipment provided by the FEF.

For more information contact Forest Education Foundation on **03 6235 8240**, visit our website: www.forest-education.com.au or email info@foresteducation.com.



EARTH BASEC LOC



## Resource Links

DAFF. 2010. Forest certification in Australia, Department of Agriculture, Fisheries and Forestry, http://www.daff.gov.au/forestry/national/forest-mgnt/certification

DAFF. 2013. Australian State of the Forests Report: Five yearly report 2013. http://www.daff.gov.au/ABARES/forestsaustralia/Pages/SOFR/sofr-2013.aspx

DECCEE. 2010. Australia's emission projections. Department of Climate Change and Energy Efficiency, Australian Government, Pp 34.

DCCEE. 2010a. Who the Kyoto Protocol Impacts, Department of Climate Change and Energy Efficiency,

http://www.climatechange.gov.au/government/initiatives/kyoto/kyoto-ratified.aspx

DCCEE .2010b. *Kyoto Protocol*, Department of Climate Change and Energy Efficiency, http://www.climatechange.gov.au/government/initiatives/kyoto.aspx

DCCEE. 2010c. More about the Kyoto Protocol, Department of Climate Change and Energy Efficiency,

http://www.climatechange.gov.au/en/government/initiatives/kyoto/kyoto-protocoldetail.aspx



## FAQs – forests, website & resources

#### FREQUENTLY ASKED QUESTIONS - FORESTS

Here are some of the most common questions that you may have about forests, forest management, forest services and wood products education in schools and their answers.

If you don't find the information you're looking for here, please check the **related** websites page that lists websites with further industry information or **email us**.

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- Q. What is a forest?
- Q. What is the role of forestry?
- Q. What is sustainable forest management?
- Q. How do you produce timber and wood products?
- Q. What is the future?

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### Resources

Print Resource: 🖨 🔝



#### Lesson Overview:

In this lesson students will learn about renewable and non-renewable resources and the energy and processes used to produce various every day materials and products and their impact on the environment.



To make the most of this lesson, download the PDF lesson plan and watch the video. You have two options for watching your video, watch it via the embedded YouTube player or watch it via the YouTube website link provided.



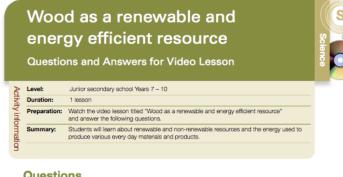
### DOWNLOAD RESOURCE

File Name: Video\_QA\_Science.pdf

File Size: 195.09 kb

File Type: PDF

◆ DOWNLOAD



	Questions						
0	<ol> <li>Explain the difference between renewable and non-renewable resources and provide an example for each.</li> </ol>						
	2. Why is it important that we replant trees after harvesting?						
$\circ$							
	What are some every-day goods produced from processing non-renewable fossil fuels?						

## **Teacher Support**



http://forestlearning.edu.au/find-a-resource/article/27/wood-as-a-renewable-and-energy-efficient-resource.html

#### Wood as a renewable and energy efficient resource

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https://www.youtube.com/watch?v=05oxv-AF-m8

#### Year Level/s:

7, 8, 9, 10

#### Key Curriculum Areas / Subject:

Science

#### National Curriculum Codes:

ACSHE121, ACSHE136, ACSHE230, ACSSU116, ACSSU190

#### Strand Content Description:

#### Science

- ACSHE121 Science understanding influences the development of practices in areas of human activity such as industry, agriculture and marine and terrestrial resource management.
- ACSHE136 Science understanding influences the development of practices in areas of human activity such as industry, agriculture and marine and terrestrial resource management.
- ACSHE230 The values and needs of contemporary society can influence the focus of scientific research.
- ACSSU116 Some of Earth's resources are renewable, but others are non-renewable.
- ACSSU190 Energy conservation in a system can be explained by describing energy transfers and transformations.



Critical and Creative Thinking, Ethical Understanding, Personal and Social Capabilities

#### Cross Curriculum Priorities:

Sustainability

#### Curriculum Connections:

Design and Technologies

#### ScOT Catalogue Terms:

Energy Conservation, Environmental Management, Industries, Non-Renewable Resources, Renewable Energy

#### Theme/s:

Forestry - Sustainability and Certification, Forestry Products - Processing and Technology, Forest Futures - Carbon Renewable Resources and Innovation

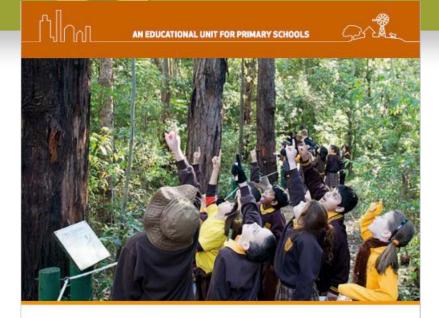
#### Resource Type/s:

Primary: Multimedia

Secondary: Student Worksheet

#### General Capabilities:

## PIEFA Membership



Exploring sustainable practices in food and fibre production

YEARS 5 & 6
Design and Technologies



Forestry was represented in 14 of the 17 Units of Inquiry developed by PIEFA in 2014/15.



Investigating key Australian fibre production practices in the cotton, timber and wool sectors

YEARS 7 & 8

Design and Technologies,
Science and Geography



## FOREST Industry School LEARNING Engagement Program

Industry and School Engagement campaign, collateral and support for industry to engage with schools.

- Marketing collateral in trade magazines
- Will prompt industry to make contact with schools about forestlearning
- Aim to drive teachers to forestlearning and address teacher requirements (pedagogy)
- Opportunities to partner with industry leaders for launch
- Australian Forest Education Alliance partners providing contributions.











## **Timelines**

Activity	I III III III K
New resources	Ongoing – will have 60 forestry lessons on forestlearning by 30 June 2016. In additional promotional campaign and advertising targeting teachers
Conferences	Representation via PEIFA at National Science, Technology, Geography, Education, Principals Agriculture conferences

Updated collateral Ready for CONASTA in July 2015 and will include trees and other collateral

September 2015 – to include small modifications and new Website update collateral

Industry-School engagement National launch in September 2015 – with industry press campaign campaign

Australia Forest Education Tentatively for August in either Sydney or Melbourne Alliance Annual Meeting

PIEFA National Conference Opportunity to feature Forest and Wood Products at Canberra conference

Research

Into the reach of forest learning with teachers – September 2015

# FOREST Thank you LEARNING

If you require any further information – please do

not hesitate to contact me at:

tania@forestlearning.edu.au

0412 149624

Or go to:



www.forestlearning.edu.au and have a look.

Thank you