

## CHAMELEONS GO GREEN

Website for: [www.chameleonisland.co.nz](http://www.chameleonisland.co.nz)

HIGHLIGHT ON WEBSITE: Seven integrated games that build on each other, pyramid style, as the level of knowledge and complexity increase. Schools may purchase at cost and re-sell to students at retail for fund raising purposes. Topics include: Energy efficient appliances; energy rating systems, carbon taxes, subsidies, emissions trading and your carbon footprint.

General Description: Energy efficiency of household appliances is well covered in these games that are marketed to school classrooms in New Zealand. A fictional island and government are established as the backdrop with references to scientists and the policies behind energy efficiency. These brief introductions to each game place it in perspective and provide an educational background, e.g. electricity generation contributes about a quarter of all green house gases on the island.

Age: Five to nine for the two beginning games; nine and up for the intermediate two games; twelve and up for the three games that involve money. The games involving finances may be difficult for middle school students.

Number of Players: Generally two unless more cards and boards are provided.

Cost: \$21.40 wholesale for each individual game (\$34 recommended retail).  
\$67.50 for a box including the seven individual games (\$112.50 retail).  
\$303.75 for a classroom pack (for 20 players) of an individual game.  
These prices include the GST tax. Prices may vary with the type of currency. More details are at the website.

Ease of Play: Very easy to very complicated.

Format: Each game uses the same set of cards and two board games. Higher level games incorporate energy consumption permits and “Chameleon dollars.” One die and several “change of fortune cards” are also included. A timer and calculator are required for games involving finances.

Strategy: Ranges from simple matching of card colors to outfoxing your opponent to point accumulation to maximizing energy efficiency at the lowest cost.

Scientific Validity: Uses internationally recognized energy rating systems that apply to the European Union, the Americas and Australasia.

Educational Value: Very good. The three “base” games provide a foundation, knowledge and virtue. Four subsequent games lead to more knowledge, information on carbon taxes, energy subsidies, emissions trading and carbon footprints.

Up to Date: Copyright 2008.

Strengths: Attractively packaged and presented. The games incorporate costs, subsidies, permits and trading options, topics not usually covered in climate games. As such, the game mimics the carbon market, including types of traders and other advanced concepts. Players may compare their game to market information on the website.

Detailed instructions are provided in a well written booklet with excellent graphics. Included are: Materials; Introduction; How You Win; How to set up the Game; and How to Play.

The website provides YouTube videos on how to play each game.

The excellent “How Big is Your Carbon Footprint?” is a non-game section included with the instructions. It explains the carbon footprint concept, gives detailed examples, instructions for calculating your footprint and eight categories with which to compare yourself.

Weaknesses: The three games involving money become increasingly complicated as concepts such as call options, future contracts, phase II, types of traders etc. are incorporated.

Focus: Energy efficiency of eight household appliances is the core around which the games are constructed. Energy rating systems are incorporated into the games as are the energy consumption of cookers, refrigerators, hot water tanks, heaters, washing machines, lights, computers and television.

#### TABLE OF GAME COMPONENTS

| <b>Does the Game Educate about:</b>        | <b>Yes</b> | <b>No</b> | <b>Comments</b> |
|--|------------|-----------|-----------------|
| The long term time-frame of climate change |            | x         |                 |

|   |   |   |  |
|---|---|---|--|
| Contributions from various greenhouse gasses  |   | x | Mentioned in the glossary                              |
| The Need for Political Action                 |   | x |  |
| Economics: Costs and Benefits                 | x |   |  |
| Individual actions that you can take          | x |   |  |
| Visual impacts of climate change              |   | x |  |
| Global Consequences of climate change         |   | x | Mentioned in the footprint                             |
| Feedback loops                                |   | x |  |
| New Technology to reduce climate change       | x |   | Limited mainly to appliances and financial instruments |
| Climate computer models                       |   | x |  |
| What we know from past climates               |   | x |  |
| Predicted increases in global warming         |   | x |  |
| Sources of greenhouse gasses                  | x |   |  |
| Energy efficiency                             | x |   |  |
| Global population increase                    |   | x |  |
| Carbon offsets; Cap and Trade                 | x |   |  |
| Examples of programs to reduce climate change | x |   |  |
| How much greenhouse gas could be released     |   | x |  |
|   |   |   |  |
|   |   |   |  |