## EFTF Year 8 Science standards

|  | | A | B | C |
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|  | | The student demonstrates: | The student demonstrates: | The student demonstrates: |
| Science Understanding | | * **Detailed** understanding of **all** the energy supply choices including: * energy transfer chains, * environmental concerns, * operational requirements * Final energy proposal has been **justified** clearly through the **detailed integration** of: * energy requirements of their country, * its resources, * the need to protect the environment, * understanding of base and peak load supply and * cost to the country and its consumers | * An understanding of **most** of the energy supply choices including: * energy transfer chains, * environmental concerns, * operational requirements * Final energy proposal has been reached through the examination of: * energy requirements of their country, * its resources, * the need to protect the environment, * cost to the country and its consumers | * An understanding of some of the energy supply choices with reference to **some** of the following: * energy transfer chains, * environmental concerns, * operational requirements * Final energy proposal has been reached through the examination of **some** of the following: * energy requirements of their country, * its resources, * the need to protect the environment, |
| Science as a Human Endeavour | | * The energy proposal demonstrates a **thorough understanding** of the following requirements and **balances** their ethical implications: * need for energy, * the want of national and individual economic prosperity and * the need to protect the earth and her ecosystems | * The energy proposal demonstrates a **good understanding** of the following requirements and **attempts to balance** their ethical implications: * need for energy, * the want of national and individual economic prosperity and * the need to protect the earth and her ecosystems | * The energy proposal demonstrates **some** **understanding** of the following requirements and **acknowledges** the ethical implications: * need for energy, * the want of national and individual economic prosperity and * the need to protect the earth and her ecosystems |
| Skills Inquiry Skills |  | * **Detailed justification** for the inclusion and exclusion of **all** energy supply choices based on **all** available data sources including the **detailed analysis of questions** and responses from consultant presentations | * **Clear justification** for the inclusion and exclusion of energy supply choices based on **multiple data sources** including **some analysis** of responses from consultant presentations | * **Attempts at justification** for the inclusion and exclusion of energy supply choices based on **some of the data sources** |

|  | A | B | C |
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|  | The student has/can: | The student has/can: | The student has/can: |
| Science Understanding | **Refer to Activity Sheet 2 and discuss individually with each student** | | |
| 1. **Clearly identified** if their country has adequate natural resources that are required for **each** of the available energy sources and can provide **detailed evidence** to support their claims. 2. **Clearly identified** whether the energy sources are capable of providing Base-Load Power and can **clearly articulate** the importance of Base-Load power for an electricity supply. | 1. **Identified** if their country has adequate natural resources that are required for **each** of the available energy sources and can provide **evidence** to support their claims. 2. **Identified** whether the energy sources are capable of providing Base-Load Power and can **discuss** the importance of Base-Load power for an electricity supply. | 1. **Identified** if their country has adequate natural resources that are required for **each** of the available energy sources and can provide some **evidence** to support **most of** their claims. 2. **Identified** whether the energy sources are capable of providing Base-Load Power and can **define** Base-Load electricity supply. |
| Skills Inquiry Skills | **Refer to Activity Sheet 4 and discuss individually with each student** | | |
| 1. **Clearly identified** **country appropriate** Positives and Negatives for **each** available energy source and can **clearly justify** the inclusion or exclusion of **each** energy source for their country through reference to **multiple data sources including** energy webpages, activity sheet 1- Country data and Energy Consultant briefings. | 1. **Identified country appropriate** Positives and Negatives for **each** available energy source and can **provide evidence** for the inclusion or exclusion of **each** energy source for their country through reference **to data sources which may include** energy webpages, activity sheet 1- Country data and Energy Consultant briefings. | 1. **Identified** Positives **and/or** Negatives for **each** available energy source and can **provide some evidence** for the inclusion or exclusion of most energy sources for their country. |
| Science as a Human Endeavour | **Refer to Activity Sheet 5 and discuss individually with each student** | | |
| 1. **Justified in detail** for the energy mix which has been chosen to provide for their country over the next 50 years. The mix **clearly shows evidence of a balance** between the needs for Energy, prosperity and the global environment. | 1. **Provided some justification** for the energy mix which has been chosen to provide for their country over the next 50 years. The mix **shows some evidence of a balance** between the needs for Energy, prosperity and the global environment. | 1. **Offers some explanation** for the energy mix which has been chosen to provide for their country over the next 50 years. **The mix has been determined through reference to at least two of the following**: the needs for Energy, prosperity and the global environment. |