

Except from

Curriculum for a Sustainable Future:



A proposal to increase environmental and energy literacy in Alberta students

2nd edition

October 2020

Table of Contents of Complete Document

Executive Summary	3
Section 1 - How the Curriculum for a Sustainable Future was Created	4
1.1 The purpose and process for the 2nd edition	4
1.2 The Process from 2014 to 2020	5
Section 2 - Key Concepts and Outcomes to Prepare Students for a Sustainable Future	6
2.1 Creating a sustainable future: environmental and energy literacy	6
2.2 What is a Key Concept, Learning Outcome and Skills?	7
2.3 Proposed Key Concepts and Student Learning Outcomes	8
Section 3 - Teaching and Learning Resources	19
Section 4 - Classroom Field Testing	20
Section 5 - Assessment	20
5.1 Authentic Assessment	20
Appendices	22
Appendix A - Energy Literacy Definition and Key Concepts	22
Appendix B - Energy and Education Professionals March 2020 Workshops - Organizations that participated	26
Appendix C - Reference Resources	27

Executive Summary: Excerpt

What should K - 12 students in Alberta learn about environment, climate, and energy? This document captures the community's best thinking when it comes to answering this question.

Now more than ever, Alberta's over 700,000 K-12 students need to be prepared for their future – a future in which they will face many challenges as they strive for reliable and affordable energy, a healthy and diverse environment, and economic prosperity. For decades Albertans have wrestled with this - witness the tension between the many commitments to reduce greenhouse gas emissions by governments and corporations and Alberta's current economic struggles. The complexity of dealing with the pressing need to reduce greenhouse gas emissions, to meet increasing energy demand, to be responsible stewards of nature and our environment, and to provide economic prosperity is something that Albertans continuously deal with. At the same time, federal and provincial governments are responding to the recommendations of the Truth and Reconciliation Commission, several of which emphasize the importance of land, water, and the environment in Indigenous cultures, and engage with historical and contemporary issues related to land and environmental rights and protection. **Alberta's students deserve to be prepared for dealing with all these complex and interconnected issues - and they want to engage as active citizens.**

In 2010, the Alberta Council for Environmental Education (ACEE) began this work by creating an Environmental Education Framework (with support from Alberta Education). Then in 2014, ACEE created a multi-stakeholder Education Task Force with representation from industry, non-governmental organizations, and the expert teaching community - including government observers from Alberta Education. They used the framework and interviews with 35 opinion leaders to develop the first version of the Curriculum for a Sustainable Development in November, 2014 that outlined what students need to learn to be environmentally and energy literate.

Since 2014, ACEE has continued to steward this all-important process, and has created over a dozen versions of this document, updating it as new information and new thinking helps inform best curriculum practice. **The energy and climate change landscape is changing quickly so in early 2020 we used workshops and on-line surveys to engage experts and stakeholders in the energy and education sector** to capture their best thinking, resulting in this 2nd edition.

The purpose of this document is to assist Alberta Education in Alberta's K-12 curriculum development. **Hundreds of passionate and well-informed professionals helped create this document; now is a critical time to ensure Alberta students benefit from a curriculum that prepares them for their future.** We believe that Alberta's students must develop new understandings of complex natural and energy systems and the interconnections between energy, environment, society and economy.

The government of Alberta has recognized this in policy: the 2020 Ministerial Order on Student Learning states, "Students will demonstrate an understanding of economic development and entrepreneurship, and will recognize the responsibility we share for environmental stewardship and sustainability."

Energy and environment topics are intertwined and **must** be taught in an integrated context across subjects and disciplines; teaching these topics in disciplinary 'silos' does not prepare students for dealing with the complexity and interconnections of energy, environment, society and economy.

What's Next

The 2nd edition will be delivered to Alberta Education to support its work on new curriculum; and we'll continue to share this information with education leaders and stakeholders to ensure that the content in this document is infused into new curriculum, along with the support needed for teachers to teach this content. We will also demonstrate the need for this education by sharing the evidence we've gathered through recent youth polling and focus groups. For more information or to learn more, please visit <https://www.abcee.org/curriculum-development> or contact Kathy Worobec - kathy@abcee.org

Why this Excerpt?

Section 2 of the complete document outlines what students need to learn to be environmentally and energy literate. We created this excerpt to highlight this important section. The complete document can be found at: <https://www.abcee.org/curriculum-sustainable-future>

Section 2 - Key Concepts and Outcomes to Prepare Students for a Sustainable Future

This section outlines what it means to be environmentally and energy literate and identifies the key concepts and outcomes that students need to learn to create a sustainable future. Having an energy and environmentally literate citizenry allows for the dialogue, decisions and choices needed to achieve a sustainable future. Energy and environmental literacy are an outcome of energy and environmental education.

2.1 Creating a sustainable future: environmental and energy literacy

In the original Curriculum for a Sustainable Future, the Education Task Force created the definition of environmental and energy literacy. The 2020 reviewers used the Alberta Energy Literacy definition to revise and update the definition of an environmentally and energy literate person.

An environmentally and energy literate person will:

▲ Know and understand

- we are part of our environment
- natural systems and processes
- how energy and matter flows and changes, and the relevance of energy conservation and efficiency to energy systems and processes

- how energy systems have and are evolving and why
- why we need energy, how we produce energy, and the benefits and costs to ourselves, our communities and the environment
- different energy forms, how each is used locally and globally, the lifecycle of each energy form, and how we measure energy
- interconnections of natural systems
- interconnections and impacts of environment, society and economy

▲ Utilize a variety of skills

- systems thinking
- critical thinking
- problem solving
- creativity
- analysis
- communication
- dialogue to find commonality among different perspectives including Indigenous perspectives
- collaboration
- facilitation
- cooperation

▲ Take personal and collective action

- continually evaluate their own attitudes regarding the environment and energy
- make choices shaping their own life regarding their energy use and environmental impacts
- work collectively to shape decisions regarding energy, environment, society and economy

2.2 What is a Key Concept, Learning Outcome and Skills?

The **key concepts** outline what students, by the end of grade 12, should know and be able to do. Key concepts represent the ‘big ideas’ that give meaning and importance to information/knowledge and make sense of our interconnected world and life beyond the classroom. It helps to develop understanding by offering opportunities to link, review and use their knowledge in broad contexts. In this way, awareness of key concepts can help deepen learners’ knowledge and understanding.

A **learning outcome** outlines the knowledge and abilities that students need to acquire.

Skills encompass the knowledge, competencies and abilities to perform specific tasks. Skills are developed through experience as well as study. Skills cover a wide range from life skills to job skills. Skills development should be incorporated across all grades and subjects in an age-appropriate manner.

Teachers need to choose pedagogical approaches that build skills as well as achieve the learning outcomes for students to have a full grasp of the key concepts.

2.3 Proposed Key Concepts and Student Learning Outcomes

To promote the interdisciplinary connections, the reviewers agreed that the key concepts should be organized by theme instead of subjects (how they were organized in the first version of the CSF).

There are four themes with key concepts identified for each theme:

1. We Depend on Our Environment
2. Energy in Our Lives
3. Our Energy, Environment and Climate Evolution
4. Our Sustainable Future

For each key concept, learning outcomes have been developed to show a progression from K-12. For each learning outcome, the subject(s) that it best aligns with has been identified - science (Sc), social studies (Soc St) or wellness (W). The key concepts and learning outcomes can also be used in other subjects such as language arts, math, and arts. Career & Technology Foundations (grades 5 to 9) and Career & Technology Studies (grades 10 to 12) also provide many opportunities through the Natural Resources pathway.

The progression from K-12 has been identified by division levels - Div - I (grades K to 3), II (grades 4 to 6), III (grades 7 to 9), IV (grades 10 to 12).

Skills required to be environmentally and energy literacy have also been identified after the four themes. These should be incorporated across all grades and subjects in an age-appropriate manner.

THEME 1 WE DEPEND ON OUR ENVIRONMENT			
KEY CONCEPT	LEARNING OUTCOME	SUBJECT	DIV.
Humans are part of nature: we depend on ecosystems and on the network of interactions among organisms and within and among ecosystems.	I demonstrate respect towards all living things.	Sc	I
	I experience the components of local habitats that provide essential elements for all life including my daily living.	Sc	I
	I understand my role as an integral part of an ecosystem and the interconnections between humans and the natural environment in which we live.	Sc	II
	I describe how the choices I make impact the environment (air, land and water) and I make	Sc	II

Curriculum for a Sustainable Future: Excerpt

	choices that have a positive environmental impact, locally and globally.		
	I understand that healthy ecosystems provide the requirements that are essential to all life, such as fresh air, clean water, and fertile land.	Sc	III
	I can identify, through various ways of knowing, the living and non-living components of my local ecosystem, and give examples of the way in which they are connected locally and globally.	Sc	III
	I understand that there are various ways of viewing ecosystems – humans as part of ecosystems, we rely on ecosystems for our survival, Indigenous perspectives as sacred and life-giving.	Sc	IV
	I recognize the limits to the life-sustaining resources Earth can provide to support human life.	Sc/Soc St	IV
Earth's natural systems are constantly changing from both natural and human causes.	I experience and give examples of ways in which natural and human events have changed the land where I live (e.g. draining or restoration of a wetland, a beaver dam, forest harvest or tree planting).	Sc	II
	I describe the ways in which human activities (recreational, industrial, etc.) impact the environment – positively or negatively, and describe how these effects can be cumulative.	Sc	III
	I understand that ecosystems have a finite capacity to absorb human impacts before they change.	Sc	III
	I identify inputs, outputs, and positive and negative feedback loops within human and natural systems in my daily life, and demonstrate how changes to part of the system can affect the entire system.	Sc	IV
	I investigate how complex natural systems can change, and explore the causes of such changes.	Sc	IV
	I compare the rate of change of natural systems over time (e.g. millennia).	Sc	IV
Exploration, discovery and knowledge of the natural and built environment where we live develops a sense of place and supports locally-based stewardship and citizenship.	I discover and document the features of my local natural and built environment that make it special to me.	Soc St	I
	I explore and assess how the local environment to which I belong is essential to my life – land for food, resources for energy, clean air and water.	Sc	I
	I demonstrate citizenship and stewardship by developing ideas on how I can make positive environmental impacts in my community.	Soc St	II
	I design, plan, implement and assess a strategy to improve the health of my local environment – land, air or water.	Sc	III

Curriculum for a Sustainable Future

	I explore and understand the longstanding presence and environmental understanding and practices of Indigenous peoples in my region.	Soc St	III
	I critically evaluate and compare the management and use of land and water in nearby places and in places such as provincial or national parks.	Soc St	IV
	I predict changes that will occur in my local environment and defend an argument for or against these changes.	Sc	IV
Direct experiences with nature develops emotional, mental, psychological, behavioural and physical well-being, a sense of wonder, and appreciation for natural beauty.	I explore a natural environment using my senses.	W	I
	I describe what I notice and feel when I am in nature.	W	I
	I express my view on the beauty and importance of nature.	W	II
	I demonstrate the skills necessary to enjoy nature safely in various kinds of weather conditions.	W	II
	I reflect upon the importance of the natural environment and outdoor living to my personal wellbeing and a healthy lifestyle.	W	III
	I develop interpersonal skills by practicing leadership in an outdoor environment.	W	III
	I create and implement a plan to spend time in nature for my personal well-being.	W	IV
Biological diversity varies according to geography and is essential for healthy ecosystems.	I see, touch and identify diversity in my own schoolyard/community and describe the value it provides for my community.	Sc	I
	I recognize that both cultural and biological diversity creates resilient and adaptable natural, social and economic systems.	Sc/Soc St	II
	I describe patterns of diversity over space and time.	Sc	III
	I understand that biological diversity includes species, genetics and habitat and that all three improve our quality of life and standard of living.	Sc	IV
	I demonstrate ways of preserving biological diversity locally and globally.	Sc	III-I V
Human life is reliant upon the health of our natural environment and this requires an ethic of respect, kinship and stewardship for the natural environment.	I demonstrate actions that reflect compassion, respect, kinship and stewardship for the environment and others (e.g. planting a pollinator garden, reducing and cleaning up litter).	W	I
	I understand that human health is reliant upon the health of the environment.	W	II
	I identify how the personal choices I make impact the environment, my health and that of others.	W	II/III
	I improve my personal health by spending time in nature.	W	I/II

Curriculum for a Sustainable Future: Excerpt

	I predict the outcomes of increased environmental degradation on my personal health (e.g. water and air quality).	W	III
	I demonstrate actions that will improve the environment and my personal health.	W	III
	I work collaboratively to create and implement a plan to show respect, kinship and stewardship for the environment.	Sc/Soc St	IV
	I reflect on the relationship between empowerment, locus of control, and environmental citizenship.	Soc St	IV
THEME 2 ENERGY IN OUR LIVES			
KEY CONCEPT	LEARNING OUTCOME	SUBJECT	Div.
Energy sources and processes used to transform energy sources into usable energy in our daily lives; and how we consume and measure energy.	I understand energy is necessary to sustain life and is used to meet our needs and desires.	Sc	I
	I identify what produces, transports and stores energy in my home or community.	Sc	I/II
	I describe a variety of technologies that are used to create usable energy.	Sc	II
	I identify primary (sources) and secondary energy (electricity, heat, plastics, transportation fuel) used to meet our needs and desires.	Sc	II
	I understand the fundamentals of energy (forms, sources, properties, laws, processes, transformations).	Sc	III/ IV
	I calculate the measurement of energy consumption in different units (natural gas - gigajoules, electricity - kilowatt-hours, transportation fuels - litres/kilometre, food - kilocalorie).	Sc	III/ IV
	I estimate energy consumption over different time periods (daily, monthly, annually).	Sc	III/ IV
	I explore the principles of energy efficiency and conservation to reduce energy use and associated costs, and to calculate cost/benefit analysis.	Sc	III/ IV
	I identify the attributes of our energy systems that are important in meeting our energy demand.	Sc	IV
	I understand local and global energy sources and the regional differences in natural resources and energy use.	Soc St	III/ IV
I develop an understanding of per capita energy use from local to global.	Soc St	III/ IV	
I analyze and compare energy sources based on a variety of factors such as efficiency, cost, impacts and amount of energy stored per unit volume or mass	Sc	IV	

Curriculum for a Sustainable Future

	and strategize an energy future that considers economic, social and environmental impacts.		
Flows of energy and matter in systems.	I demonstrate flows of energy and matter in Earth's ecosystems including its water, carbon, nitrogen and sulphur cycles.	Sc	III/ IV
	I understand human energy systems - their purpose, reliability, resilience and interactions with other natural systems.	Sc	III/ IV
	I describe how energy systems are impacted by natural processes and human-made processes.	Sc	III/ IV
	I recognize the complexity of energy systems required to meet our energy demands.	Soc St	III/ IV
	I identify our role in energy systems - producer, consumer, citizen, change agent.	Soc St	III/ IV
Human energy systems have changed over time and will continue to change.	I identify how energy sources have changed over time and are often driven by societal need, invention, innovation and other factors (economics, accessibility, environment).	Sc/Soc St	II/III
	I explore the interconnections between energy use and environment, society and economy both historically and into the future.	Soc St	III/ IV
	I describe the drivers of global energy consumption.	Soc St	IV
	I consider the connections between energy demand and the impacts on Indigenous peoples including resource extraction, colonial expansion, land rights and treaties.	Soc St	II
	I describe some of the drivers of Alberta's energy resource development (e.g. ingenuity, economy, and resource accessibility).	Soc St	II
Our food energy choices and systems have implications for our health and the health of others; and economic, social and environmental impacts.	I identify the places my food comes from.	Soc St	I
	I explore different ways of analyzing the food choices I make – nutritional, health, cost, environment, economic.	Soc St/W	II
	I compare the economic, social/health and environmental impacts of a variety of food choices and production methods (e.g. local, importing, organic, biotechnology, natural, processed).	Soc St	III
	I articulate the ways that we can meet our food needs for a growing human population in more sustainable ways (e.g. innovations and lifestyle changes).	Sc	III
	I explore food systems in the context of population growth, urbanization, and globalization to achieve poverty reduction, food security and nutrition.	W/Soc St	IV

Curriculum for a Sustainable Future: Excerpt

THEME 3 OUR ENERGY, ENVIRONMENT AND CLIMATE EVOLUTION			
KEY CONCEPT	LEARNING OUTCOME	SUBJECT	DIV.
Impacts of our energy choices on the environment, society and quality of life (health, knowledge and standard of living) at both the local and global level.	I recognize that energy choices have immediate and long-term consequences both locally and globally.	Soc St	II
	I recognize that our energy choices need to consider the environmental (land, air, water, climate, biodiversity), social (equity) and quality of life (long and healthy lives, knowledge, and standard of living) impacts equally.	Soc St	III
	I consider the implications for my standard of living and personal lifestyle choices in a world in which the quality, quantity and cost of energy will vary.	Soc St	IV
	I consider my personal energy use decisions in relation to the impacts on our environment, society and quality of life and estimate my carbon footprint.	Sc/Soc St	II/III
	I understand life cycles and cost/benefit analysis of products and processes to make choices about energy sources, energy consumption and our energy future.	Sc	IV
	I understand the tensions between environmental, societal and economic impacts and the processes used in making decisions regarding natural resource extraction, production, distribution and consumption.	Soc St	IV
	Economic prosperity from energy resource development will change over time and can have positive and negative social and environmental impacts.	I compare Alberta's energy resource use over time with its economic prosperity, societal/cultural impacts and environmental impacts.	Soc St
I identify Alberta's opportunities and responsibilities in meeting Alberta's energy demand and providing energy to the world.		Soc St	III
I explore economic models and how they have changed over time.		W/Soc St	III
I identify various economic models from linear to circular economic models.		W/Soc St	IV
I explore the various provincial and federal regulations that govern the development and production of energy resources and evaluate the need for both provincial and national energy strategies.		Soc St	IV
I describe how we meet our energy requirements by developing strategies around energy security, supply and demand, technical efficiency, energy conservation and other innovations.		Soc St	IV

Curriculum for a Sustainable Future

	I give examples of how commodity prices can create 'boom and bust' cycles and can contribute to global fiscal inequality.	Soc St	IV
Our production and consumption of carbon-rich fossil fuels along with other industrial and agricultural activities create a variety of greenhouse gases, which are changing the Earth's atmosphere.	I differentiate between weather and climate and the role each plays in my daily life.	Sc	II
	I understand the role climate plays in healthy ecosystems both locally and globally.	Sc	II
	I describe the greenhouse effect and understand the contribution of various gases to our atmospheric conditions.	Sc	II/III
	I describe how addition of greenhouse gases to our Earth system leads to climate change that affects human and natural communities around the world.	Sc	II/III
	I understand that science is a process that continues to evolve and that Indigenous ways of knowing and continued research lead to greater understanding of environmental issues.	Sc/Soc St	III
	I understand the relative greenhouse gas emissions contributed by different sources, uses, and jurisdictions.	Sc/Soc St	IV
	I describe the factors that create my local climate, how climate change might affect it, and how global climate change is already affecting and will continue to affect my life and the life of others (e.g. by comparing current temperature, precipitation or seasonal phenomena with historical data).	Sc/Soc St	IV
	I understand how climate change is influencing human endeavours such as international development and conservation.	Sc/Soc St	IV
	I understand climate adaptation and mitigation and engage in actions that help my school and community be more climate resilient.	Sc/Soc St	IV
	I articulate and show evidence for my understanding of climate change, and create a personal code of practice that is consistent with this position.	Sc/Soc St	IV

Curriculum for a Sustainable Future: Excerpt

THEME 4 OUR SUSTAINABLE FUTURE			
KEY CONCEPT	LEARNING OUTCOME		Div.
Imagining and creating a sustainable future requires an understanding of the evolution (over time) of economic, societal and environmental impacts and the role of decision-making and action at the personal, local, national and global level.	I compare the different roles people play in my community and the interconnections between the roles.	Soc St	I
	I plan and implement a project that helps my community.	Soc St	I
	I articulate some of the ways in which my personal lifestyle and consumer choices impact the environment.	Sc/Soc St	II
	I create and implement a personal action plan to reduce my environmental footprint for long-term benefits.	Sc/Soc St	II
	I collaborate with others in my school or community to implement an action plan to create a positive impact on the environment.	Sc/Soc St	II
	I understand that the Earth's resources and natural environment provide for all our economic and societal needs and are finite..	Soc St	III
	I compare and evaluate different culturally, philosophically and politically-driven development paradigms and perspectives, such as economy versus environment; limits to growth; and sustainable development.	Soc St	IV
	I understand and give examples of how the environment, society, and economy are interrelated and interdependent.	Soc St	III/ IV
	I use innovation and ingenuity to outline a preferred sustainable future and identify the technology and policy innovations required to achieve this future.	Soc St	IV
	Energy and climate change policies need to consider the impacts on the environment, society and the economy.	I understand the services governments provide and that voting can be used to make decisions.	Soc St
I describe how policies affect the health of ecosystems and communities.		Soc St	II
I understand the various levels of government and the role each plays in developing policy related to energy and climate change.		Soc St	III
I articulate political processes affecting energy and climate change decisions.		Soc St	IV
I understand the role and the potential of policy to influence energy choices and to reduce greenhouse gas emissions.		Soc St	IV

Curriculum for a Sustainable Future

	I understand the social, economic, political, and environmental dimensions related to climate change.	Soc St	IV
	I explore and articulate various stakeholder perspectives including Indigenous perspectives in relation to climate change.	Soc St	IV
	I create an innovative energy policy idea that will create just and equitable energy, reduce environmental impacts and contribute to our quality of life.	Soc St	IV
	I assess different energy policies for their effectiveness in creating just and equitable energy, their environmental impacts and economic impacts.	Soc St	IV
	I create and defend an energy or climate change policy for my region that meets the needs of various interests and positions of different stakeholders and understand the global connections of the policy.	Soc St	IV
	I determine, recommend, and propose strategies that address climate change (adaptation and mitigation) in my community, province, country, or internationally.	Soc St	IV
Cultural, biological, social, and economic diversity creates resilience and must be respected and valued.	I understand that Indigenous peoples have developed and maintained a unique relationship with the land and bring different ways of knowing that contribute to our natural and cultural heritage.	Soc St	II
	I examine and describe how Indigenous peoples are connected to the land.	Soc St	I/II
	I understand that diversity in all its forms should be valued and respected.	W/Soc St	I/II
	I describe examples of how diverse values and perspectives create differing viewpoints that can create tension, and create innovative and robust solutions.	Soc St	IV
	I understand how Treaties and land use negotiations with Indigenous peoples influence energy and environmental policy, and how working collaboratively to honour all perspectives is beneficial to creating a sustainable future.	Soc St	IV
Quality of life is a subjective term that is influenced by many factors including: democratic rights, health, education, environment, social conditions and programs, community, personal well-being, economy and employment.	I recognize how my needs and rights are intertwined with the needs and rights of other living things.	W	I
	I distinguish between my needs and my wants and identify factors that influence my needs, wants and rights.	W	II
	I compare and identify the various factors that influence my quality of life.	W	II/III
	I analyze and compare the different tools used for measuring quality of life.	W	IV

Curriculum for a Sustainable Future: Excerpt

I demonstrate the value of the many factors that influence quality of life and the interconnections between the different factors.

W

IV

SKILLS/COMPETENCIES TO BE DEVELOPED ACROSS ALL THEMES AND ALL SUBJECTS

KEY CONCEPT

LEARNING OUTCOME

Collaborative and facilitation skills are essential to resolve conflicts, solve complex problems, and create good solutions and decisions.

I contribute to a group or community project.

I contribute to a group or community project that requires research and agreement on an action.

I explore and apply various interpersonal and group processes to accomplish decision-making in group projects.

I develop and practice the skills of empathy, kindness, active listening, cooperation, facilitation, and collaboration to accomplish group decision-making and group projects.

I use a risk management strategy to identify solutions to complex problems that may be ambiguous and surrounded by uncertainty.

I understand that everyone learns and communicates in different ways and that these need to be considered and valued in group processes.

Systems thinking to describe and understand the forces and interrelationships that shape the behaviour of systems.

I observe how elements within systems change over time, generating patterns and trends.

I understand the role of feedback loops in systems and the causality of actions on a whole system (not just the parts).

I can articulate the interdependence between components of dynamic systems (e.g. our industrial energy system), and how they interact (both positively and negatively) with other systems, such as societal and environmental systems.

I can describe the different scales of systems (e.g., molecular process vs. global atmospheric consequences; local actions and their global impacts).

Critical thinking and problem-solving to determine credibility of information, analysis of information, identification of bias, navigation of ambiguity and identifying trends.

I identify problems and identify solutions that address the environment, society and economy for current and future generations.

I explore creating solutions that are 'win/win' or 'yes/and' instead of 'either/or' or 'win/lose'.

I assess credibility and bias of information and understand my own own biases.

I analyze information to gather additional knowledge, to identify trends, to develop new ideas

Curriculum for a Sustainable Future

	or solutions, and to identify cause and effect relationships.
	I am aware of future career opportunities and can make a plan to pursue my career interests.
Communication skills that respect different perspectives including Indigenous and local knowledge that help build commonality.	I understand different perspectives and embrace a variety of values regarding energy use and energy sources to bridge the gap in the energy conversation.
	I develop two-eyed seeing for finding commonality between Indigenous perspectives (specifically local perspectives) and non-Indigenous perspectives (multi-culture).
	I foster an attitude of connectedness, inclusion, problem-solving, hopefulness, agency vs complacency.
Stewardship, kinship and citizenship action skills.	I assess lifestyle choices and utilize technological advancements in daily life to reduce my environmental impact.
	I contribute to the protection, conservation and remediation of our environment.
	I develop kinship with our environment that demonstrates reciprocity (mutual benefit).
	I understand our relationship with energy systems.
	I explore methods for motivating individual action and options for collective action.
	I feel confident to take action to support my vision of a sustainable future.