



# CTF Challenge Idea Generation

<b>Challenge</b>	<b>Home Energy Audit and Social Awareness</b>		
<b>Essential Question</b>	How can you lower your home energy usage and then inform others about the importance of conserving energy?	<b>Estimated Time</b>	<b>25 hrs.</b>
<b>All CTF learning outcomes should be addressed in each CTF challenge.</b>			
<b>Challenge Description</b>	As we continue to consume energy in Alberta, the costs of the energy are continually increasing. This is affecting the cost of living in our homes. Students can make small changes in their homes that will drastically decrease the amount of their home energy bills. Through this project, students will learn how to perform a home energy audit, calculate the differences in energy efficient products, and then create an awareness campaign (e.g., print, wiki, video/audio podcast) in order to inform their peers on how to save energy.		
<b>Scenario</b>	The cost of living in a house in Alberta is dictated by the cost of utilities in the home. It is important to know what your actual energy costs are so you can determine how much your monthly bill will be. By following simple conservation tips you will be able to calculate and predict the savings in a monthly bill. After taking steps to save energy, you will then create some sort of awareness campaign to inform your peers about how to actually save money at home.		
<b>Occupational Areas</b>	<p><b>BUSINESS</b></p> <input type="checkbox"/> Computing Science <input type="checkbox"/> Financial Management <input checked="" type="checkbox"/> Management & Marketing <input type="checkbox"/> Enterprise & Innovation <input type="checkbox"/> Information Processing <input type="checkbox"/> Networking <p><b>COMMUNICATION</b></p> <input checked="" type="checkbox"/> Communication Technology <input type="checkbox"/> Design Studies <input type="checkbox"/> Fashion Studies <p><b>HUMAN SERVICES</b></p> <input type="checkbox"/> Community Care Services <input type="checkbox"/> Foods <input type="checkbox"/> Legal Studies <input type="checkbox"/> Cosmetology <input type="checkbox"/> Health Care Services <input type="checkbox"/> Recreation Leadership <input type="checkbox"/> Esthetics <input type="checkbox"/> Human & Social Services <input type="checkbox"/> Tourism <p><b>RESOURCES</b></p> <input type="checkbox"/> Agriculture <input type="checkbox"/> Forestry <input type="checkbox"/> Wildlife <input checked="" type="checkbox"/> Environmental Stewardship <input type="checkbox"/> Primary Resources <p><b>TECHNOLOGY</b></p> <input type="checkbox"/> Construction <input type="checkbox"/> Fabrication <input checked="" type="checkbox"/> Mechanics <input type="checkbox"/> Electro-Technologies <input type="checkbox"/> Logistics  		
<b>Safety and/or Environmental Concerns</b>	Ergonomics <b>Remember to follow your school's and/or district's safety requirements at all times.</b>		
<b>Grade</b>	<input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input checked="" type="checkbox"/> 9		
<b>Interdisciplinary Learning Opportunities</b>	<p><b>SUBJECTS</b></p> <input type="checkbox"/> ELA <input type="checkbox"/> Health and Life Skills <input type="checkbox"/> Religious Education <input type="checkbox"/> Fine Arts <input checked="" type="checkbox"/> Mathematics <input checked="" type="checkbox"/> Sciences <input type="checkbox"/> French Language Arts <input type="checkbox"/> Outdoor Education <input type="checkbox"/> Social Studies <input type="checkbox"/> French Second Language <input type="checkbox"/> Physical Education		