

## Climate Change PBL #7: Film Production and Energy Consumption

### Problem:

According to a study published by the Institute of the Environment at UCLA, the greenhouse gas emissions associated with the film and television industry's activity in California alone account for roughly 8 400 000 metric tons of carbon dioxide equivalents. Considering Vancouver's standing as North America's third largest film centre, how can carbon emissions from direct and indirect activities resulting from film production in the lower mainland be reduced?

### Background:

The motion picture industry holds a powerful and enduring sway over the imagination of people across the globe. Indeed, some recent films like *An Inconvenient Truth* and *The Tipping Point* have been instrumental in bringing environmental issues to the public's attention. However, when watching a film or television, it is easy to overlook the sprawling industry that lies behind the scenes, bringing entertainment to life. Even less obvious are the environmental impacts of filmmaking, which involve energy consumption, waster generation, air pollution, greenhouse gas emissions and physical disruptions on location.

A 2006 study conducted by the Institute of the Environment at UCLA<sup>1</sup> found that the film and television industry in California alone accounted for the emission of 140 000 metric tons of pollutants such as nitrogen dioxide, carbon monoxide and sulfur dioxide. The contribution to these gas emissions arises both directly through the intensive usage of vehicles for local transportation as well as indirectly through pollutants generated at remote power stations for example. Though particular initiatives have been successful in the past such as advanced recycling programs, the study concluded that a lot more could be done within the industry to foster environmentally friendly approaches.

Nicknamed "Hollywood North", Vancouver has been used as a filmmaking location for nearly a century, beginning with *The Cowpuncher's Glove* and *The Ship's Husband*, both shot in 1910 by the Edison Manufacturing Company. In 2002, 75% of all Canadian foreign productions were based in British Columbia and Ontario. That same year, British Columbia led the country in foreign film production receiving 44% of the Canadian total. Presently, Vancouver is North America's third-largest film centre, just after Los Angeles and New York. It is second only to Los Angeles in television production in the world.

Activities resulting from the film and television industry are, therefore, not only an essential source of revenue in British Columbia but also consequently a large emitter of greenhouse gases as indicated by the UCLA study.

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<sup>1</sup> UCLA environmental report card, 2006. pp 4-11. Accessed Jan 8<sup>th</sup> 2008 from <http://www.ioe.ucla.edu/report%20card/RC06.pdf>

## Potential Direction

Warner Bros. Pictures and Participant Productions have made *Syriana*, a multi-layered political thriller about the global oil industry, the first major motion picture to be 'climate neutral' by offsetting 100% of carbon dioxide emissions generated by the production during filming – an estimated 2,040 tons – with investments in renewable energy (reference?). Investments were made in wind/methane power and, specifically, in projects that may not otherwise happen without this support. NativeEnergy worked with the *Syriana* producers to calculate the amount of carbon dioxide emissions from all of the film's production activities, including filming, air travel, rental car/truck emissions, hotel energy use, diesel generators on location, office/warehouse energy use and emissions from shipping. NativeEnergy then offset those emissions by purchasing renewable energy credits, or 'green tags' from renewable energy projects.

Investments were made in two projects – the construction of a family dairy farm methane generator and a wind farm in the Midwest. The wind farm is on Native American land and is Native American owned. In addition to clean energy, the wind farm created jobs and revenue streams for the tribes from the sale of electricity and the green tags. Warner Bros. Pictures and Participant Production brought critical revenues to the projects up front, contributing directly to their development and construction. Renewable energy sources such as wind and methane provide clean electricity and reduce pollution by displacing energy that would otherwise come from fossil fuels like coal and oil. By making these investments, Warner Bros. Pictures and Participant Productions were able to reduce global warming emissions equivalent to eliminating 4 million average car miles. Recently, films like *The Hulk* have been made to a high emissions control standard.

## Guiding Questions:

- What measures can be taken to reduce the impacts of film production on site?
- What can film producers do to reduce their indirect carbon emissions?
- What reasonable industry regulations might be implemented to encourage sustainability? At what level should these be implemented?
- What is the economic cost of offsetting emissions? Can the film industry sustain this additional cost? What are the economic benefits?
- What strategies can you devise to make “green” film production mainstream and easy?

## Resources

-Article in Georgia Straight about the issue of film production in Vancouver-

<http://www.straight.com/article-86421/film-biz-checks-green-cred>

-UCLA Institute of the Environment - <http://www.ioe.ucla.edu/index.html>

-Warner Bros. Studios Environmental initiatives site –

<http://wbenvironmental.warnerbros.com/>

-NativeEnergy - <http://www.nativeenergy.com/>

- Comparison of offsetting services:

carbon catalogue - <http://www.carboncatalog.org/>  
ecoBusiness Links -  
[http://www.ecobusinesslinks.com/carbon\\_offset\\_wind\\_credits\\_carbon\\_reduction.htm](http://www.ecobusinesslinks.com/carbon_offset_wind_credits_carbon_reduction.htm)

### Potential Community Engagement

Green Code Project - <http://greencodeproject.org/>  
Rapide Blanc – <http://www.rapideblanc.ca/>  
Vancouver film school - <http://www.vfs.com/>  
B.C. Film society - <http://www.bcfilm.bc.ca/index.php>  
B.C. Film Commission (government) - <http://www.bcfilmcommission.com/index.htm>  
Vancouver Film Studios - <http://www.vancouverfilmstudios.com/>