

## Directions for the case study

You have been given three scenarios to review. As a group, you need to choose ONE of these scenarios that you feel would most benefit from a health impact assessment.

1. You should document both the decision (which scenario you choose) and your reasons for doing so, as you will have to present these back to the whole room.

Below are some considerations that are often used when trying to decide on whether or not to pursue an HIA (the 'screening' stage). You can use these considerations, or instead formulate some of your own.

- Are there likely to be positive or negative health impacts that would result from the project/policy?
- Is there a likelihood that the health impacts of the project/policy might be more pronounced for some disadvantaged groups?
- Is the HIA likely to add new information that would not otherwise be brought forward?
- Is there potential to influence the decision-making process?
- Are there sufficient resources to conduct the HIA?

2. For the scenario you have chosen, what might be some approaches you would use to try to exert the greatest influence over health outcomes? In other words, what is it you would like your HIA to accomplish that would ultimately work towards better health for all? This might be: exerting influence over decision-makers to affect project siting; using the HIA to communicate with local residents over issues of risk and risk perception; permanently changing the local permitting process, etc.

## A Power Plant Upgrade

### Background:

The Township of A has a population of 40,000 people, with relatively high proportions of elderly residents and children. It is located about 35 minutes from the nearest major metropolitan center, and the primary industries are small-scale apple and sheep farming, and tourism (tourists flock to see the natural wonder of an apple tree shaped exactly like Lester Pearson). The population is expected to grow by approximately 2% per year over the next 10 years.



The main source of energy for the town is a small coal-fired power plant. The power plant is located 6 kilometers west of the township, in an area of light industry. It is upwind of many of the apple and sheep farms. It has been operating at near capacity level for the last two years. It is on a school bus route and near a large conservation area frequented by residents and tourists alike.

### The proposal:

The municipal government of Township A is proposing to retrofit the current domestic power plant to meet the town's energy needs for the next 30 years. The plan is to upgrade the existing plant to increase output while simultaneously bringing on a cleaner burning technology. Although the power output of the plant will increase, the retrofit measures should offset any potential increases in emissions; that is, it is predicted there will be no net increase in emissions as a result of the upgrade.

As part of the decision-making process, an environmental impact assessment has been requested and is currently under way. The environmental impact assessment will include an examination of the potential for disease (asthma, respiratory disease and cancer) that could be associated with emissions resulting from the retrofit construction or operation of the upgraded facility.

A group of disgruntled local residents had hoped that the plant would be replaced by a green energy source such as solar or wind power and are strongly voicing their opposition to this "unhealthy" technology.

## Biomass Energy Facility

Your community is considering the installation of a biomass energy facility. The small two megawatt (MW) facility would be located on a remote piece of land that is the site of a former landfill. The rationale for the policy is to:



- 1) Provide an alternative energy source using excess residual biomass (crowns, brush, limbs, etc) from timber harvests and ongoing forest management practices; and
- 2) Reduce pollution by diverting residual timber that would otherwise be burned in open piles; and
- 3) Reduce fire risks by removing residual timber generated during forest management practices.

Initial studies show that particulate matter and other pollutants, including greenhouse gases, can be significantly reduced using a biomass energy facility. 14,000 – 17,000 bone dry tons (BDT) of biomass would be needed to operate the facility each year. In addition, 420 – 850 tons of biochar will be produced by the facility annually and would be shipped out for disposal or non-disposal applications (such as charcoal or soil amendment). The facility is expected to operate 24 hours per day, approximately 330 days per year.

While the project seems to have many positive aspects, there has been some contention among community members regarding the potential for noise, increased truck traffic, and pollution. And some environmental groups are concerned that the project may lead to excessive forest harvest and general environmental degradation. Proponents contend that the project will reduce emissions, reduce fire risks in the area, and create new jobs, leading to a healthier environment and community.

## Planning for Sustainable Growth

### Background:

City Sunshine is planning for sustainable growth in its future. Its urban planners have spent the last several years crafting a development strategy that provides a framework for the next 60 years. The city has been growing very rapidly for the last 50 years (its population doubled between 1990 and 2009) and it desperately needs a solid vision for a way forward.

### The proposal:

City Council has reviewed the new strategy, called *Re-Vital-Eyes*. Components of the strategy include:

- No expansion of the urban boundary.
- Increasing residential density by 12% in already developed areas
- Integration of affordable housing options in all urban neighborhoods
- Transit oriented development projects in four areas of the city
- A new ring road network with Bus Rapid Transit in dedicated lanes
- Increases in the amount of dedicated pedestrian and bicycle pathways
- A permanent farmer's market in the downtown core
- Tax incentives for businesses that retrofit office buildings to the LEED standard.

Last March, the Council sent the *Re-Vital-Eyes* strategy back to the planners for further modification. Those modifications have been made, and the City Council will vote next week on whether or not to formally adopt the strategy. Once put in place, guidance documents will be drafted to help the various city departments (planning, transportation, finance etc.) understand how to implement relevant aspects of the new strategy.



## Re-zoning Farmland



Prince County is picturesque area of the province 30 km away from the capital, known for its marshes and green valleys. Although the area has some of the most fertile land in the province, in the last twenty years farmers have had increasing difficulty making ends meet. The county, in general, is in need of a “boost” and the Municipality of the County of Prince is trying to find ways to revitalise the area.

Consequently, it has proposed rezoning 250 hectares of farmland in the area of Tarentown, (population 5,000) so that the land can be developed for residential, commercial and industrial uses. They argue that although the land in question is fertile, the number of farmers willing to try and make a living off of it is dwindling and those who own the land are suffering financially. They maintain that in today’s economic climate, it is extremely difficult to make agriculture worth a farmer’s time and energy, and that farmers need every option available to them.

Plans for the rezoned land include the establishment of a “mega” supermarket, which would be the only one in the area (there is a small store in the centre of town, as well as a Farmers’ market every Saturday). The establishment of a “megastore” would respond to a need expressed by many: It would provide residents, many of whom drive 25 kilometres to the nearest such store, with far more choice at a lower price. It would also create approximately 20 jobs. This and other projects - residential, commercial, and industrial - would also be important sources of municipal income.

The current owners of the land to be rezoned support the project. However, it has met strong opposition from residents in and around the area. Some farmers who sell their produce feel threatened, as does the owner of the local store in the centre of town. Opponents have also pointed out that rezoning the land would destroy an important part of their heritage, as well as make people more dependent on food that comes from far away instead of encouraging local produce.

## Street Lighting

During the last 12 months, your city has introduced a local policy of restricting street lighting at night. In some areas, up to 50% of street lighting is being switched off at night.

The rationale for this policy is to:

- a) address environmental concerns about power usage and light pollution (excessive light at night); and
- b) help the city save money during economically challenging times.

The city has estimated that it could save as much as \$400,000 annually by cutting back on its street lighting.



This issue has been contentious with residents and businesses alike (over 3000 letters about the policy have been sent to city council), and there has been considerable and on-going media attention. Vigorous lobbying has resulted in the city lowering the targeted cutbacks in certain districts.

Opponents of the policy claim that there has been little or no consultation with the communities that are being affected. They also claim that potential health effects of the policy have been ignored: an increase in accidents and injuries, possible increase in depression from longer time in darkness, and not being able to go out because of safety fears, with vulnerable groups such as elderly people and children particularly affected.

You work for the Region, and coordinate comments made by Regional staff on proposals submitted by lower tier municipalities. Your director wants to know if an HIA should be conducted. While there is no specific timetable for a review of the policy, the very high political visibility means that any recommendations made by the Region are likely to be taken very seriously by municipal staff and city council, and may impact their future decision/actions.