



Light-Efficient Communities - Goals, Objectives and Approaches



The Goal: to minimize or eliminate waste light, light trespass and light pollution in order to improve the health and well-being of all living things, reduce energy consumption and waste.

Introduction

As with other types of pollution; noise, atmospheric, water or land, light pollution must be considered as a threat to the health and well-being of all living things within the municipality. ***It is!*** (See Policy documents from the *American Medical Association*.)

If light pollution was as evident as smoke filling the community from a fire spewing toxic smoke and chemicals, councils would be far more concerned and willing to act more quickly to protect the community. Recent research into light waste and light pollution is creating a completely new attitude towards light waste, its costs, effects and dire consequences for living things and the planet. As with other threats, a program must be developed which will identify sources, provide solutions and adopt effective bylaws which will enforce them. Many LEC Policies already exist and may be copied.

Objectives:

1. to minimize or eliminate light waste, light trespass and light pollution (light-WTP) from streetlights which are usually the greatest source of light waste in most communities.

Approach: Create a Light-Efficient Community Policy (LECP) which will enable the lighting department to

- undertake an assessment of all the exterior lighting of the municipality
- undertake an audit of lighting needs within the community to determine areas that need lighting, or are under or over-lit
- assess new luminaires (LED's and fixtures) to determine those that best meet the specifications of a LEC. (See "*LEC-Compliant Streetlight Specifications*.")
- make recommendations as to which types of luminaires and LED's should be purchased, related costs for purchase and installation as well as savings



Light-Efficient Communities - Goals, Objectives and Approaches

- e. purchase LEC-Compliant luminaires
- f. install the appropriate luminaires
- g. initiate an annual meeting where new lighting technologies and their implications for the municipality will be reviewed

2. to minimize or eliminate light wasting exterior light from residential, business, industry and government sources throughout the community.

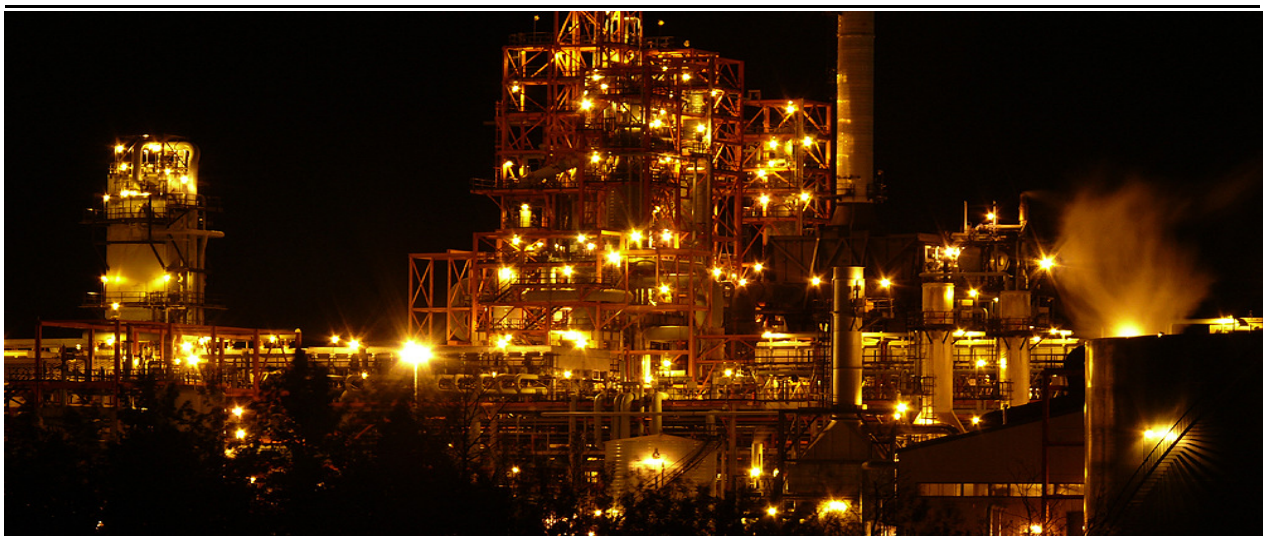
Approach: Create a LEC Policy which will enable the municipality to

- a. develop bylaws which will control and enforce exterior lighting from the above sources so that light-WTP is minimized or eliminated from these sources

3. to educate the public on the serious negative problems associated with light-WTP, including sources, remediation, and positive effects resulting from these actions.

Approach: Assign a person for or create a position of Light-Efficient Community Co-ordinator (LECC) in order to:

- a. determine the needs of the municipality in creating a LEC
- b. create a plan as to how the LEC will be created – goals, objectives, strategies, etc.
- c. co-ordinate activities related to ensuring the transition of the community
- d. act as a source of information about the LEC program, the related bylaws and other LEC-related information
- e. prepare information on the LEC transition for public consumption
- f. ensure distribution of the information to the public through various media including printed materials, social media and an interactive web site
- g. design and develop feedback mechanisms for the media used (surveys, statistics, etc.)
- h. respond to feedback and resolve associated problems in an appropriate manner
- i. prepare reports for council and the public indicating the development of the program, its status, timelines, successes, etc.
- j. work with council to ensure the smooth transition to a LEC
- k. communicate with other LEC's, LEC-related associates and consultants to obtain help and contribute to other LEC adoptions in the area



Industrial light waste can be a serious threat to community health and well-being, flora and fauna.

2017-05-19