## 4.7 Renewable Energy

### *4.7.1* Context

Nova Scotia has, in recent years, been moving towards a future where much of the province's electricity needs are supplied by renewable energy, rather than non-renewable sources like coal and oil. The *Energy Act* requires 40 percent of Nova Scotia's electricity to come from renewable sources—such as hydro, solar, wind, and tidal—by the year 2020. This will have the benefit of reducing local air pollution, reducing our contribution to climate change, and reducing our reliance on fuels imported from other countries. Cumberland has, to date, played an important role in the development of renewable energy generation in Nova Scotia, and will likely continue to do so in the future.

### *4.7.2* Wind Energy

In 2011, the Municipality of Cumberland released its Wind Energy Development Plan, developed with the support of the Union of Nova Scotia Municipalities. Through this project, the Municipality identified areas that are appropriate for wind turbines, and areas that are inappropriate for wind turbines for reasons such as water supply areas or areas of cultural significance. The project also established requirements to help reduce the impact of wind turbines on surrounding communities and natural features.

As of 2017, Cumberland hosts three large-scale wind farms at Stevens Mountain, outside of Springhill, and on the Tantramar Marshes. Council intends to continue to support the establishment of large-scale wind turbines in appropriate locations, as well as smaller wind turbines for personal and on-site commercial use.

**Policy 4-51:** Council shall, through the Land Use By-law, define three categories of wind turbines:

(a) Domestic-scale wind turbines, which are very limited in scale and intended to generate electricity only for on-site consumption or are mechanical in nature and are intended to pump water.

(b) Small-scale wind turbines, which are limited in scale and are generally intended to meet the electricity needs of on-site uses, but may export energy to the grid through "net-metering" programs.

(c) Large-scale wind turbines, which are large in scale and are intended for commercial supply of electricity to the grid and may be built individually or in a collective "wind farm".

**Policy 4-52:** Council shall, through the Land Use By-law, permit domestic-scale wind turbines as an accessory use in all zones and shall establish requirements for their design and siting to minimize safety concerns and conflicts with neighbouring uses.

**Policy 4-53:** Council shall, through the Land Use By-law, establish a Wind Turbine Restricted Overlay that identifies inappropriate areas for small- and large-scale wind turbines and includes lands such as, but not limited to, drinking water supplies, bird conservation areas, important cultural areas, historic sites, and ecologically-significant lands.

**Policy 4-54:** Council may consider amending the Wind Turbine Restricted Overlay to add locations where a local tourism plan concludes that small- and large-scale wind turbines are not compatible with the goals of the tourism plan.

**Policy 4-55:** Council shall, through the Land Use By-law, permit small- and large-scale wind turbines in all zones, but shall prohibit small- and large-scale wind turbines on lands covered by the Wind Turbine Restricted Overlay.

**Policy 4-56:** Council shall, through the Land Use By-law, establish requirements for the design and siting of small- and large-scale wind turbines, and such requirements may include, but are not limited to, separation distances from dwellings and other features, setbacks from property lines, blade clearances, and tower and signage design.

**Policy 4-57:** Council shall, through the Land Use By-law, allow for the waiver of separation distances between wind turbines and existing dwellings, and shall permit new dwellings to be built within the separation distance from existing wind turbines.

**Policy 4-58:** Council shall, through the Land Use By-law, establish requirements for the information to be provided and process to be followed for permitting, maintenance, and decommissioning of wind turbines.

### *4.7.3* Solar Energy

Cumberland County receives, in an average year, some of the most sunlight in Nova Scotia. This abundant solar resource can be captured and converted to electricity or heat energy for space heating and domestic hot water.

Solar collectors are unique in that their modular nature makes them suitable for installation at a wide range of scales. They can be done on a small scale, with solar panels on homes and businesses, or on a commercial scale in “solar farms”. In many cases, they can be integrated into existing development with little or no impact on the surrounding community. However, it must also be recognized that, on the large scale, they can use a significant area of land. Given Cumberland’s large land base, and given the fact that other activities such as agriculture can often take place among the panels, this is not often an issue. Where it can become an issue is in areas with existing services (sewer and/or water) that should be utilized by development, or areas where a denser form of development is desired. As such, solar collectors will not be permitted as a main use in these areas.

**Policy 4-59:** Council shall, through the Land Use By-law, permit solar collectors as an accessory use in all zones.

**Policy 4-60:** Council shall, through the Land Use By-law, permit solar collectors as a main use in the Rural Resource Zone, Agriculture Zone, Rural Industrial Zone, Wellfield 3B Zone, and Commercial Recreation Zone.