

During 2011 the JCOS began a project to identify "sustainability indicators". Policy 2.3 of the 2008 Comprehensive Plan states that "It is the policy of the CBJ to develop and use sustainability indicators to measure Juneau's progress toward becoming a more sustainable community".

The Plan further establishes a Standard Operating Procedure (2.3.SOP1) "Measure CBJ capital improvements, projects, ordinances, and purchases against adopted sustainability indicators to ensure that the CBJ is moving toward a sustainable future."

Chapter 2 of the Plan directs the JCOS to develop sustainability Indicators. It notes that their development begins by "selecting important, diverse, measurable categories and topics that the community will commit to measure at regular intervals", and that they will be developed "from ongoing issues that emerge in the community".

In January 2011 the JCOS began this work by reviewing a broad range of approaches and possible sustainability indicators. Over the following months we focused our efforts on the "Implementing Actions" identified in Section 2 of the 2008 CBJ Comp Plan. These include a range of social, economic, and environmental areas (Sections 2.1.IA3 through 2.1.IA12, and 2.2IA1 through 2.2.IA6); about two-thirds of them deal with energy use and energy conservation.

Given the significance of energy in the Plan, and to the community, we decided to further focus our initial efforts on identifying appropriate indicators related to energy use. We were greatly aided in this by the development of the Juneau Climate Action and Implementation Plan (JCAP) during 2011. The JCAP compiles data on energy use and greenhouse gas emissions in Juneau for 2010 and compares it with baseline data from 2007. It also recommends a goal of reducing GHG emissions by 25% by 2032, and sets out a series of implementation actions for achieving this goal. In November, 2011, the CBJ Assembly adopted the JCAP (Resolution 2593).

We recommend that the CBJ Assembly adopt the following three sustainability indicators relating to energy:

- 1) Fossil fuel use
- 2) Renewable energy use
- 3) Greenhouse gas emissions

1) Fossil fuel use. This indicator is measured as MMBtu's (millions of British thermal units) of fossil fuel used annually. The JCAP provides a methodology for measuring petroleum energy use. The burning of petroleum fuels generates about 75% of local energy used in Juneau, mostly for transportation and heating. Juneau is highly dependent on oil for heating, and the economies of households, businesses and agencies are affected by fuel oil costs. . It also breaks out data by CBJ government activities, as well as the community as a whole.

2) Renewable energy use. This indicator is measured as MMBtu's of renewable energy used annually. The JCAP provides a methodology for measuring this. Hydropower provides much of Juneau's electricity, and about 25% of the total energy consumed in the borough.

3) Greenhouse gas emissions. This indicator is measured as metric tons of carbon dioxide equivalent (MTCO_{2e}). The JCAP provides a methodology for measuring GHG emissions, and sets a specific goal for reduction of GHG (25% reduction by 2032).

We recommend annual data collection and report to the Assembly by ?.