



Community Charter

Mayo Dark Skies Community Group

Our Vision...

To protect the night skies for present and future generations by promoting responsible lighting in our communities that addresses energy efficient needs, yet is also kind to the environment, biodiversity and our wellbeing.

Background information:

In Ireland, between 1992 and 2010 there was a +60% increase in light level across most of the country as determined from satellite measurements, mainly due to increased development during the boom years. This trend has continued with over 480,000 public lights now installed across the country consuming 210GWh in electricity annually and costing €56million annually. It is estimated that currently some 30% of public lighting energy ends up outside of the useful area. This is energy lost to light pollution due to inefficiencies in design, shielding and use of appropriate levels of light.

Artificial lighting is undergoing a radical worldwide change toward high intensity LEDs and these are appearing more frequently on our roads and streets in an attempt to reduce energy costs. LEDs appear to have many advantages: they are cheap, energy-efficient and easily controlled; however, there is an increasing body of research emerging that indicates a need for consideration and consultation before LEDs with high blue-rich colour content are widely installed.

This blue-white light reflects from grass and foliage and scatters high into the atmosphere, causing more than five times more sky-glow than previous warm white/amber lights. The benefits of otherwise good downward direction of light may be negated the scattering of blue-rich light, excess brightness and glare.

The impact of light pollution not only affects our view of starlight from above, but can interfere with our sleep patterns, circadian clock and melatonin production. Wildlife, trees and insects are also affected by the interruption of natural night and daylight cycles.

With this in mind, we work to endorse the UNESCO principles of Earth Charter, in relation to the rapid increase in LED lighting, principle 6 “Ecological Integrity” is particularly appropriate ... “ *Prevent harm as the best method of environmental protection and, when knowledge is limited, apply a precautionary approach.*”

We will do this ...

Through community education programmes and workshops, researching new and innovative ways to light our communities and by developing examples of lighting projects that are sympathetic to our goals for night sky preservation without compromising the needs of our community. We will seek partnerships with other community groups, and work together to raise awareness of light pollution and explore solutions to create well lit, welcoming environments in our communities through innovative and creative lighting strategies.

We will work together...

With all of our community representatives, energy users and the SEC Network to help maximise impact, share resources and knowledge. We will work to ensure that the communities surrounding Mayo Dark Sky Park become widely recognised as being a leader in innovative lighting projects that reduce carbon emissions without a negative impact on biodiversity in our rural towns and villages.

We commit to:

- complete an example of best practice in lighting for small towns that is attractive, energy efficient and sympathetic to our environment.
 - Reduce energy consumption by reducing light waste in our communities.
 - Collaborate with the SEC Network and SEAL to provide feedback, share knowledge and contribute to the national movement for Sustainable Energy Communities.
- Produce a transferable project plan for other similar communities to use as a template and guidance for lighting improvements.

