



## IDENTIFY:

# LED FLOODLIGHTING UPGRADE FAQs & CHECKLIST

Upgrading your floodlights to LED can reduce your club's energy use, save money on lighting maintenance and improve the quality of lighting on your pitches. The Green Club Floodlighting FAQs and Green Club LED Floodlighting Planning Checklist are designed as an introduction to LED floodlighting upgrades for interested clubs. Seek professional advice before starting your planning of any energy project.

By upgrading their floodlights to LED and carrying out a retrofit of their clubhouse, Green Club Clan na Gael in Co. Louth made a 55% saving in energy use and in CO2 emissions. See the Clan na Gael case study at: <https://learning.gaa.ie/greenclub/casestudies>

## Why upgrade to LED?

- LED floodlights use up to three times less energy than traditional metal halide or other high-energy bulbs and last four to five times longer.

## Where should we start?

- Your first port of call when planning a major energy project in your club should be to talk to reputable energy consultant or energy expert.
- Gather all the information you can on your club's energy use from the past number of years – calculate the running time of your lights and the energy (e.g., electricity or diesel) and maintenance (e.g., lights and generator) costs. This will help you calculate the payback period for your LED upgrade.
- Clubs in the 26-counties who are members of a Sustainable Energy Community (SEC) can engage with their energy mentor for support in understanding their energy data – see the Green Club SEAI Community Programmes infosheet for more details.

## What lighting levels do we need?

- The GAA has the following recommendations for lighting (Lux) levels:

	Gaelic Football	Hurling & Camogie
Training	75 Lux	200 Lux
Club Matches	250 Lux	350 Lux
Inter-County Matches	300 Lux	500 Lux

## Should we run our LED lights off our generator or off the mains?

- It is far less harmful to the environment and often more cost efficient to run your floodlights off mains electricity. Talk to your energy consultant about your options and check with the ESB or Northern Ireland Energy about your power capacity to run floodlights off mains electricity.

## How much will an LED upgrade of our floodlights cost?

- Costs will vary from club to club but can include planning, civil works, pole installation, wiring and costs for installation and commissioning of the new lights. Work with your energy consultant to calculate the full costs.

## Is there funding for LED floodlighting?

- If you are upgrading existing floodlights to LED, there can be funding available from the SEAI (26 counties) through the Community Energy Grant programme <https://www.seai.ie/grants/community-grants/> LED upgrades can also be included in Sports Capital Programme, LEADER, Sports NI and other community and facility development fund applications.



## Will we need planning permission?

- If your club is upgrading existing floodlights to LED you won't need planning permission, unless there are significant physical changes to your floodlighting installation as part of your upgrade – e.g., an increase in the height of lighting poles. If in doubt, check it out.
- If your club is installing new floodlights, planning permission will be required.

## What else do we need to know?

### Check your MIC

If you are planning to run your lights off the mains, talk to your electricity provider to ensure that the Maximum Import Capacity (MIC) for your club is appropriate. An unnecessarily high MIC for your club use will result in higher monthly bills while if your MIC is too low you risk a heavy charge if your electricity use ever goes above the MIC defined in your electricity contract.

### Be aware of your impact

Lighting of your pitches, walkways, clubhouse, car parks and grounds can have an impact on your neighbours and on biodiversity – planning your lighting use and timing carefully and thoughtfully can save money for your club and minimise disruption to your local community and to local wildlife. <https://www.darksky.ie/>

### Ensure that all documentation is in order

Ensure all works are carried out by specialist and experienced contractors, that you have examined their previous work, that all insurance and paperwork is in place and that the GAA insurance department has been notified of planned works.

### Plan ahead for safety

If your club hosts evening matches, you should make provisions to have emergency lighting systems installed to ensure that spectators can leave the ground safely in the event of a mains power or generator failure



#### TOP TIPS

**Ask other clubs who have upgraded their own floodlights about their experience and for their advice. A case study from Clan na Gael in Louth is available at: <https://learning.gaa.ie/greenclub/casestudies>**



## Green Club LED Floodlighting Planning Checklist

**This is a non-exhaustive list designed as a guide for clubs in the early stages of considering a floodlighting upgrade or installation**

### **For clubs planning an LED floodlighting upgrade or installation:**

We know the lighting (lux) level we want for our pitch.

We have sought independent advice – e.g., from an energy consultant, Sustainable Energy Community (SEC) mentor (26-counties) or an energy expert in the club or community – as a first step in our planning.

We have calculated the full cost of the project, including civil works, pole installation, wiring and installation and commissioning of the new lights.

We have calculated the ongoing costs and savings, from energy use, maintenance and carbon emissions.

We have explored funding options, e.g., through the SEAI Community Energy Grants programme, community and facility development grants (e.g., Sports Capital, Sport NI Funding or LEADER funding) or as identified by our energy consultant.

We will inform the GAA Insurance Department before we begin any works.

### **For clubs currently running lights off diesel generators:**

We have carried out a financial and environmental cost-benefit analysis of powering our new lights off mains electricity instead.

### **For clubs planning to run their LED floodlights off mains electricity:**

We have confirmed with our energy consultant, electricity provider and/or ESB/ Northern Ireland Energy that we have the correct electricity supply to power our new floodlights.

We have contacted our electricity provider to inform them of our plans and to ensure our Maximum Import Capacity (MIC), bill charges and contract conditions are appropriately set to our club circumstances and our expected usage.

### **For clubs planning a new LED floodlighting installation project:**

We have calculated the additional costs to our annual energy bills.

We are aware of the requirement to apply for planning permission for our new floodlights.

We are satisfied that our pitch can withstand the increased activity that new floodlighting will bring.