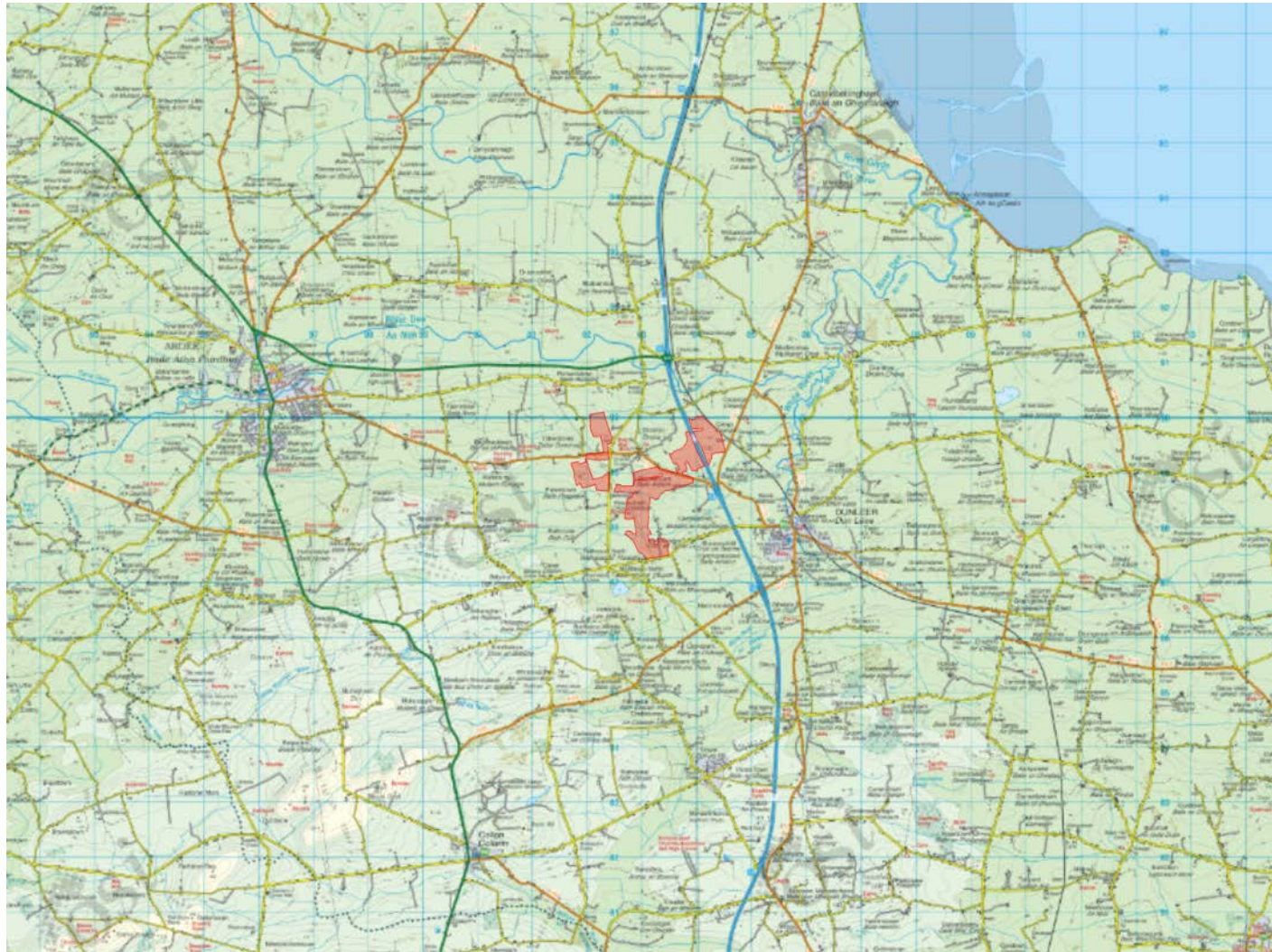


## Location of Proposed Development



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# Proposed Knockdinnin Solar Farm



Introduction Notice, October 2024



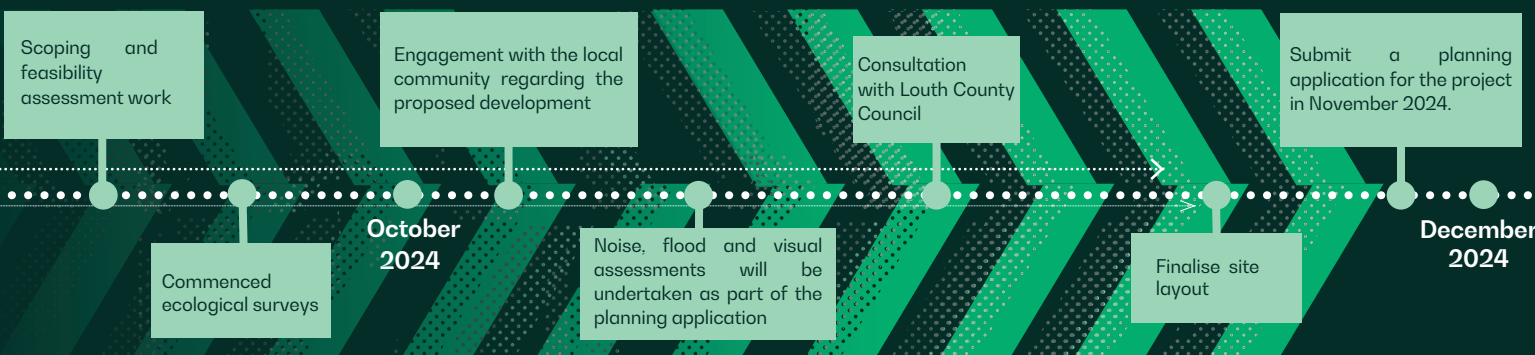
c.95MW

Powering up to 20,000 homes<sup>1</sup>

c.181 hectares



## Next Steps and 2024 Indicative Timelines



## Contact Us

Please visit our project website which we will keep updated as the project progresses:  
<https://regnumrenewables.ie/projects/knockdinnin-solar-farm/>

If you have any feedback, comments or queries in relation to the project, please do not hesitate to contact us through our dedicated project email address:  
[knockdinnin@regnumrenewables.ie](mailto:knockdinnin@regnumrenewables.ie)

Alternatively, you can email the project team at:  
[hello@regnumrenewables.ie](mailto:hello@regnumrenewables.ie)



## Introduction

Regnum Renewables Developments Ltd (Regnum) would like to introduce ourselves and our proposed solar farm development, to be known as Knockdinnin Solar Farm.

This information is being circulated to you and your neighbours, as the proposed site boundary is within the townland of Mooremount, Knocktober, Painestown, Dromin, Knockdinnin, Ballymageragh and Cangy. The purpose of this leaflet is to introduce you to the project and to encourage open dialogue. We are committed to engaging with you, to ensure transparency and keep you updated on the status of the project.

## About Us

Regnum is a wholly owned Irish company where respect for the land and the people who live on it is always utmost in our design. To be truly sustainable and deliver the renewable energy innovation that our parishes, villages, towns, and cities need; we must work closely with the surrounding communities.

Our focus throughout the development process is to benefit local communities which host a development in their area during the operational lifetime of the solar farm. Benefits come from boosting the local economy, reducing carbon emissions; and providing direct community investment via the project's community benefit fund.

We, at Regnum, believe in driving Ireland's carbon free energy future through our expertise in renewable technologies.

## Climate Action Plan 2024

Addressing climate change is a shared global responsibility to ensure a sustainable and habitable planet for future generations. The science is indisputable, and the effects of climate change are already clear.

Ireland is committed to achieving climate neutrality by 2050. The Climate Action and Low Carbon Development Act 2021 is a legislative framework in Ireland which sets a legally binding target of a 51% reduction in greenhouse gas emissions by 2030, compared to 2018 levels.

The Act establishes clear targets and commitments to align with national, EU, and international climate goals.

Electricity will play a crucial role in the decarbonisation of various sectors through electrification, such as transportation, heating, and industry.

The Climate Action Plan 2024 (CAP24) is the latest update in Ireland's climate strategy, aiming to build upon the previous Climate Action Plan 2023. CAP24 focuses on implementing policies, measures, and actions to support the attainment of the 2030 and 2050 climate targets.

Specific targets for 2030 include achieving 9,000MW from onshore wind, 8,000MW from solar, 5,000MW from offshore wind energy, to raise the share of renewable electricity to 80% by 2030.

1. SEAI Energy in Ireland Report, December 2022, Section 10.4, Table.42

## Solar Energy in Ireland

Advancements in solar panel efficiency and energy storage solutions has helped to drive growth of solar energy in Ireland. Solar energy is a clean energy source which does not produce greenhouse gases when generating electricity.

There is over 1,185MW of solar projects installed in Ireland to date, with nearly 600MW of this from ground-mounted utility scale projects that connect directly to the grid. It is forecasted that almost 1600MW will be connected by the end of 2024, according to the Irish Solar Energy Association's 2024 Report.

By 2030, 80% of Ireland's electricity is targeted to be generated from renewable energy and solar energy is expected to play a significant role in this, particularly during the summer months. In order to achieve this, we must maintain a significant rate of deployment of utility scale solar farms.

The generation profile for solar is very compatible with that of wind in Ireland. The longer and brighter days in the summer months allow for greater generation during the typically less windy months. Similarly, the solar farm will generate less power in the windier winter months.

While offshore wind energy will play a significant role in decarbonisation of the electricity market in Ireland, we remain reliant on projects that can be more readily deployed in order to achieve our 2030 targets, set out in Government's Climate Action Plan 2024.

For context, in order to reach our renewable energy targets, we must achieve and maintain a deployment of 2,300MW of renewables, annually, between 2024 and 2030 (CAP24).

## Currently: 2030 Targets:

- ✓ 43% of total electricity generation from renewables in 2023<sup>2</sup>
- 80% share of electricity generation from renewables
- ✓ 1,185MW solar energy installed<sup>3</sup>
- 8,000MW solar power installed

## Project to date

- ✓ Completed a preliminary **feasibility and constraints study** for the proposed project
- ✓ Completed ecological site walkovers and extensive surveys
- ✓ **Bat surveys** and mammal surveys have been completed on site
- ✓ A **preliminary layout** has been produced, taking into account all ecological, geographical and geological buffers, as well as buffers from existing infrastructure.
- ✓ Engineering design has been completed for internal tracks and site access

## Process of Identifying our Knockdinnin Site

Our Development Team carried out a systematic site selection process to select this site, overlaying constraints including:

- o County Development Plan,
- o Residential setbacks,
- o Solar resource (irradiance),
- o Environmental Designations (SPAs / SACs & NHAs),
- o Linear Constraints (including roads, rivers, utilities),
- o Land use,
- o Distance from grid and grid capacity,
- o Slope stability land slide susceptibility,
- o Hydrology / flood plains,
- o Ecology (terrestrial and ornithological),
- o Landscape, topography and cumulative impact,
- o Heritage - Built and Natural,
- o Transport routes.

Once we select a site, we commission feasibility reports on planning, grid, and engineering to verify our selection work.

## What makes Knockdinnin suitable for a solar farm?

- ✓ There is a strong irradiance resource available at the site.
- ✓ The Louth County Development Plan 2021-2027 supports the development of local renewable energy resources,
- ✓ No significant ecological concerns identified based on detailed surveys that were carried out on site.
- ✓ There has been positive engagement from private landowners.
- ✓ Access to the grid via existing overhead lines that cross the site and a new on-site substation.

## Proposed Development

The proposed c.181ha layout of the site is subject to change as detailed geological, hydrological, and ecological studies progress over the coming months.

Existing hedgerows and field boundaries will be preserved where possible, with additional planting to enhance natural screening. During the project's operational life, there will be minimal disturbance, with regular maintenance being the primary activity on site.

The project will feature;

- ❖ Solar panels,
- ❖ Ground-mounted frames,
- ❖ Inverters,
- ❖ Access tracks,
- ❖ On-site substation
- ❖ Ancillary infrastructure,
- ❖ Construction compound,
- ❖ Underground cabling,



## Project Benefits

Potential local, regional and national benefits from this project:

### Locally:

- ❖ Establishment of a Community Benefit Fund, supporting positive local initiatives, clubs and schools
- ❖ Substantial commercial rates paid to the Local Authority, each year
- ❖ Up to 100 jobs supported during construction
- ❖ Significant development contributions to be paid to the Local Authority in advance of construction as per the adopted S48 Contribution Scheme
- ❖ Continued agricultural use of land for small stock grazing

### Nationally:

- ❖ Reduction of electricity prices by removing expensive fossil fuel generators from the system and replacing with cheaper renewable alternatives
- ❖ Increased security of energy supply and progression towards energy independence for Ireland, reducing reliance on imported fossil fuels
- ❖ Cleaner air and water quality through the offset of over 22,700 tonnes CO<sub>2</sub>eq per annum<sup>3</sup>
- ❖ Contribution to national and regional renewable energy targets for both 2030 and 2050 targets



## Community Benefit Fund

If the project is granted planning permission, Regnum is committed to setting up a community benefit package to support the residents living closest to the project. We will collaborate closely with the community to customise this financial support package, placing local individuals at the forefront of decision-making regarding its implementation and impact. This money is used for:

- ❖ Education initiatives,
- ❖ Installation of solar panels and energy efficiency upgrades,
- ❖ Biodiversity and community enhancement projects to support local wellbeing,
- ❖ Local services and resources,
- ❖ Local schools,
- ❖ Sports clubs,
- ❖ Tidy Towns groups,
- ❖ Community development associations.



## Best Practice Guidance Report: Large Scale Solar Energy Development

In Ireland, there are no official planning guidelines for developing solar farms. The most recent guidance for large-scale solar energy projects is the report by Fehily Timoney from November 2023, which we at Regnum use for our solar farm developments. This report addresses essential aspects of solar farm development and offers best practice guidelines on topics such as noise, visual impact, glint and glare, ecology, community engagement, grid connections, environmental considerations, archaeology, and the entire process from construction to decommissioning.

<sup>2</sup> Annual Report 2023, EirGrid Group

<sup>3</sup> SCALE OF SOLAR, 2024 REPORT, [www.irishsolarenergy.org](http://www.irishsolarenergy.org)