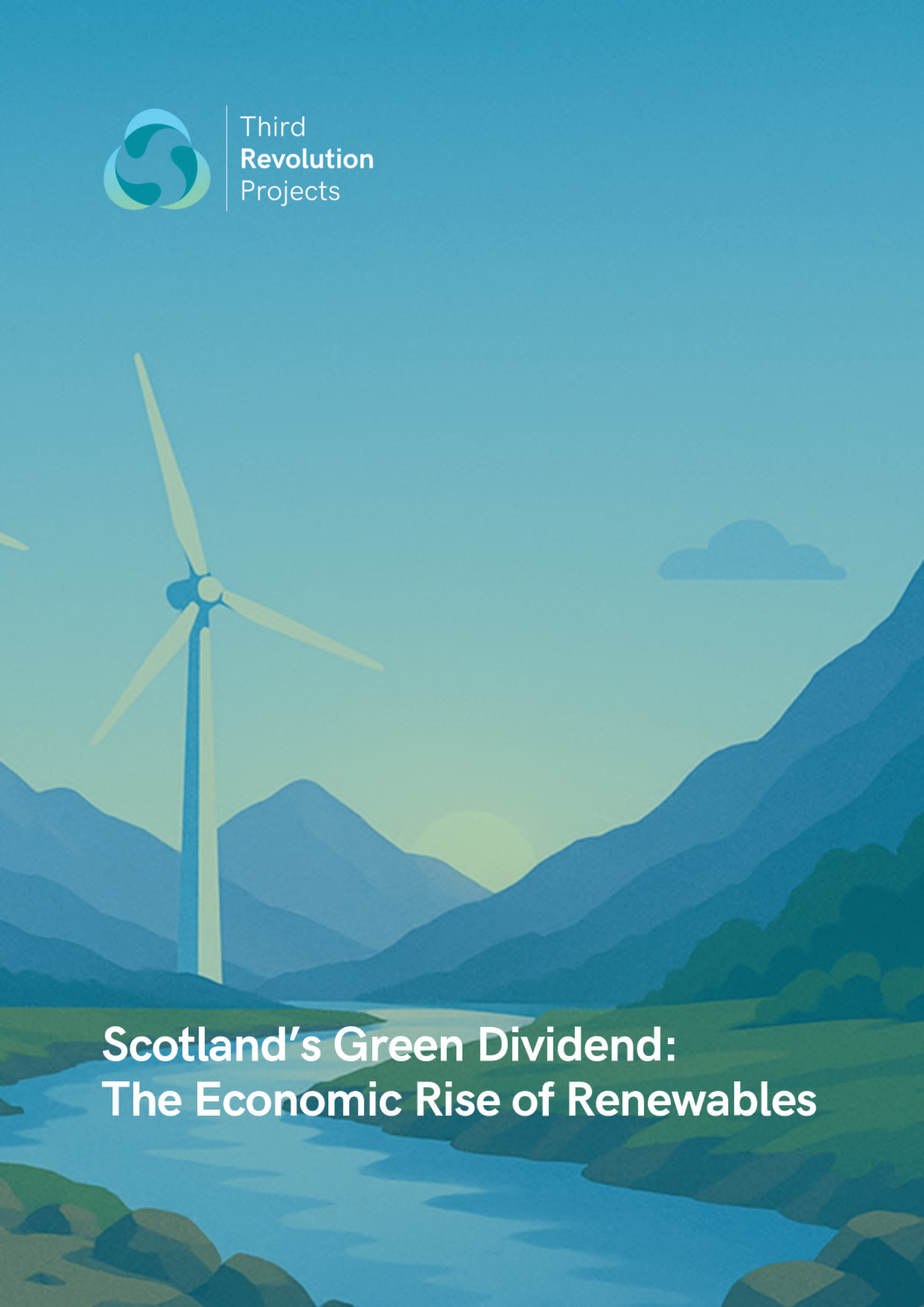




Third
Revolution
Projects



Scotland's Green Dividend: The Economic Rise of Renewables

Generating Capacity

30,000

25,000

20,000

15,000

10,000

5,000

0

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

■ Onshore Wind

■ Offshore W

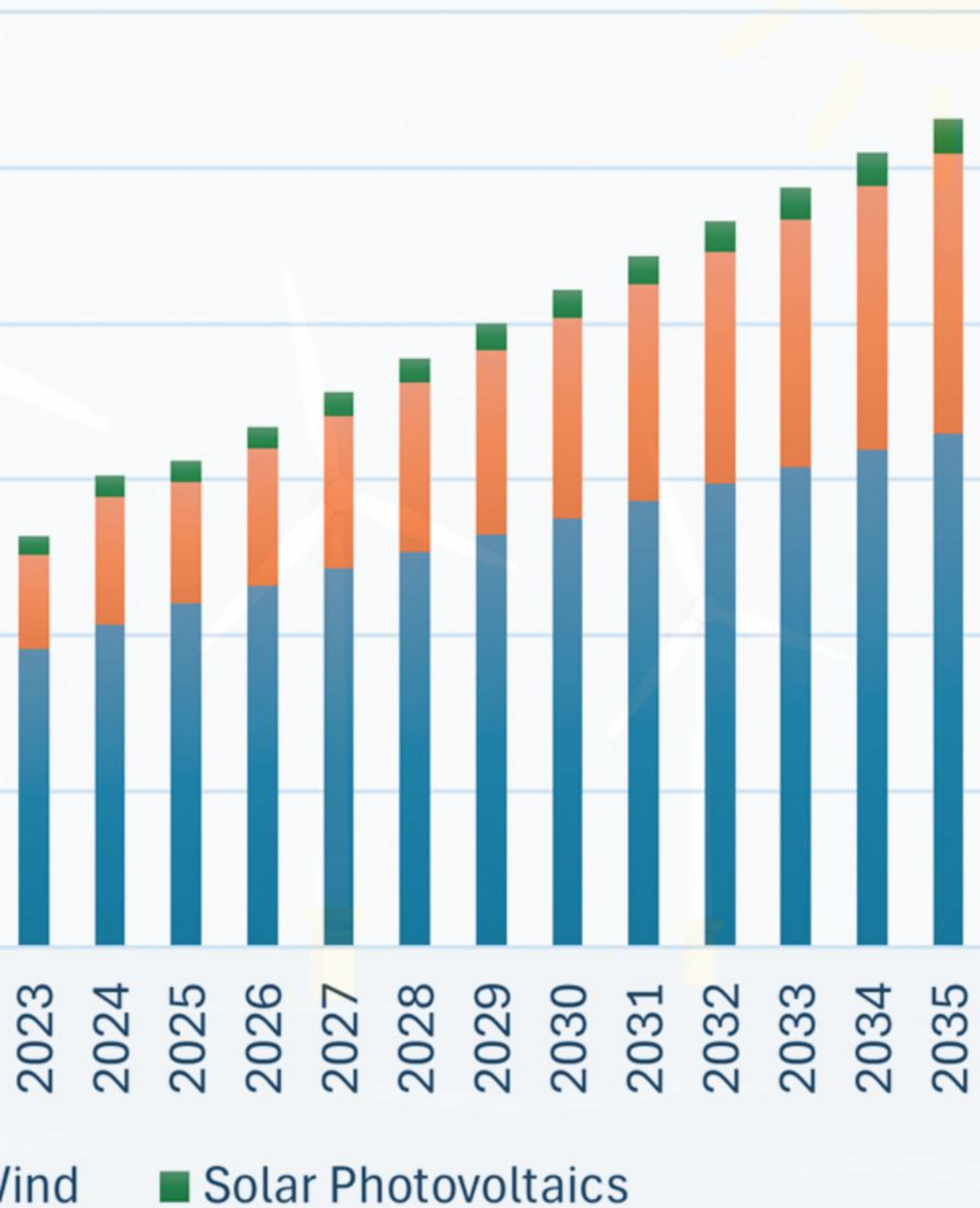
The total generating capacity from solar and wind has increased from 3,136 MW in Q4 2011 to 15,123 MW in Q4 2024.

Extrapolating the data forward, it is projected that total solar and wind capacity could reach over 26,500MW by 2035.

Solar PV generating capacity is expected to increase by 60% between 2024-2035.



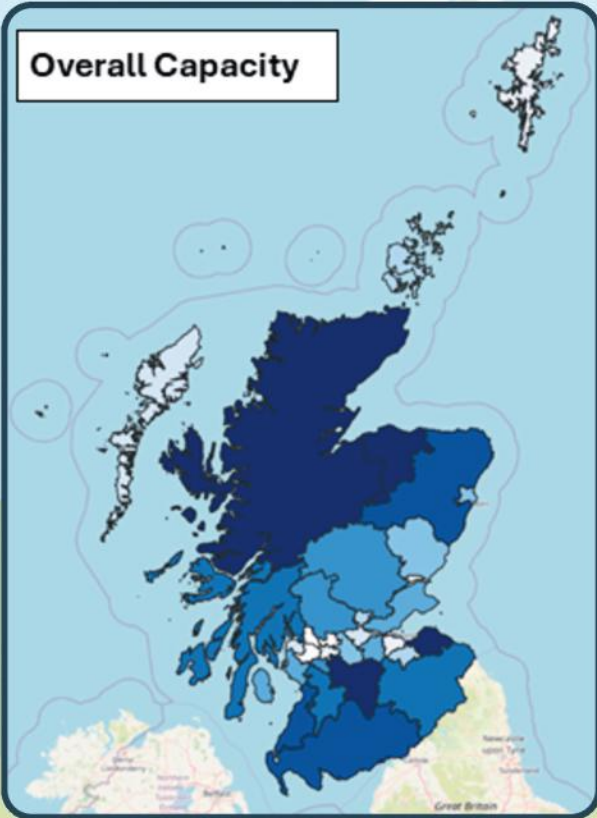
Offshore wind generating capacity is projected to increase by 120% between 2024-2035.



Regional Share of Generating Capacity

In Scotland, the renewable energy generating capacity varies significantly within different regions. The below infographics highlight the local authorities within Scotland that had largest shares for onshore and offshore wind and solar in 2023.

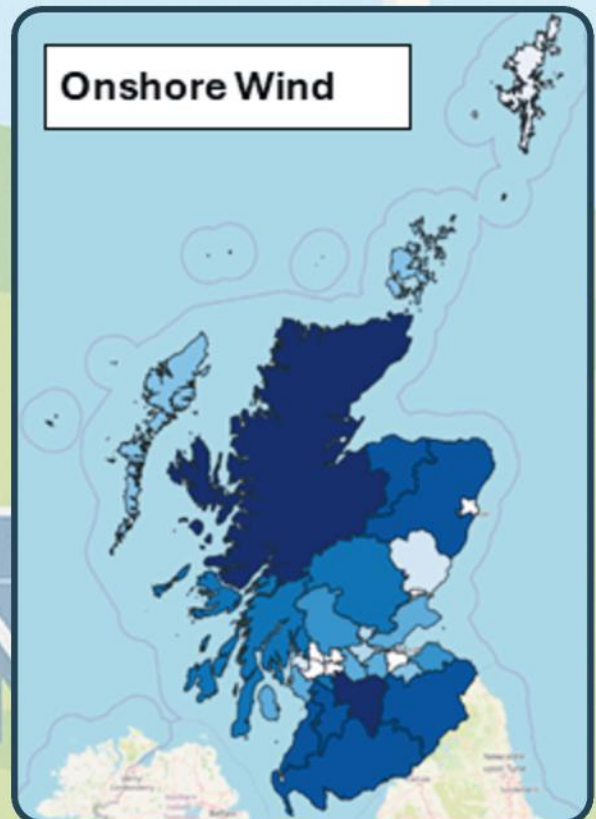
Overall Capacity



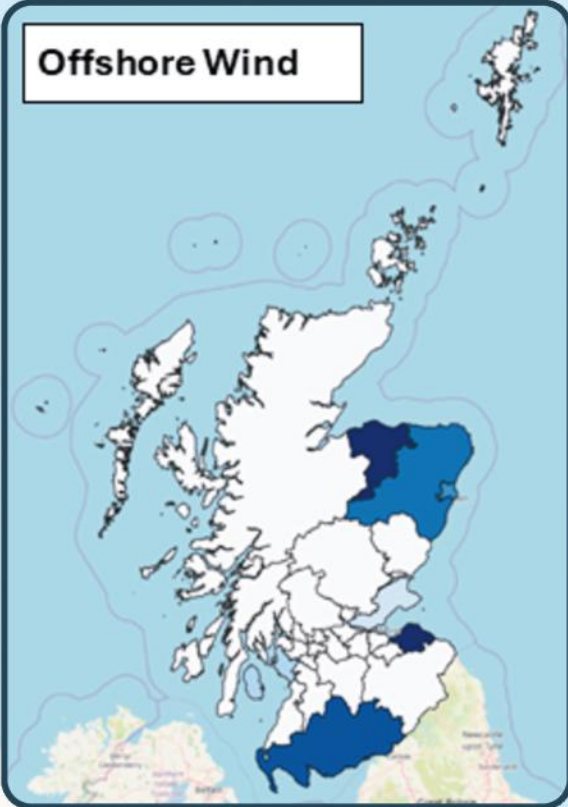
In 2023, the Highlands Local Authority held the largest share of Scotland's Wind and Solar Generating Capacity (15.8%), followed by Moray (15.6%).

The Highland Local Authorities largest generating capacity is within Onshore Wind, accounting for 21.4% of the Scottish total, followed by South Lanarkshire, with a 15.3% share.

Onshore Wind

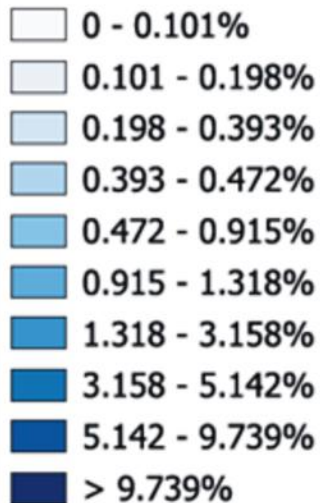


Offshore Wind

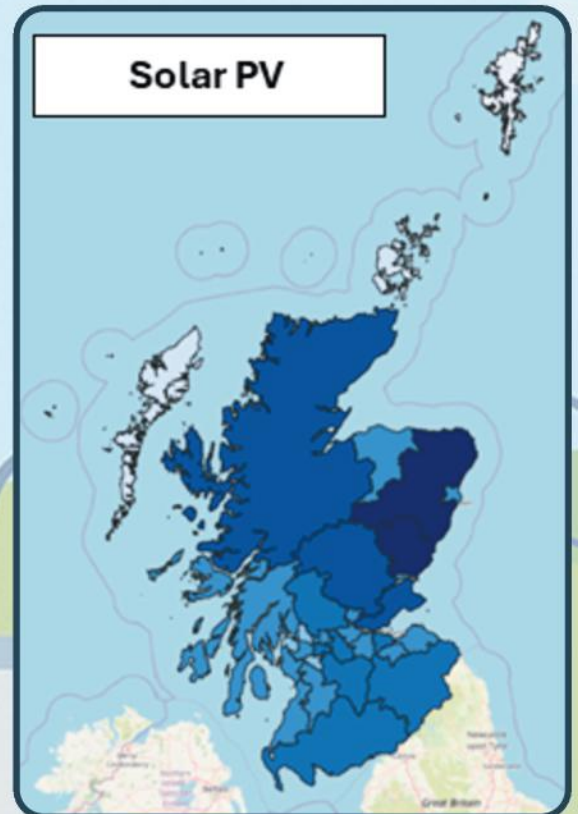


Moray (51.6%) and East Lothian (36%) dominate the offshore wind generating capacity, accounting for 87.6% of the total. Dumfries and Galloway (5.8%) Aberdeenshire (4.3%) and Aberdeen City (1.7%) also contribute modestly.

Share of Scottish Generating Capacity



Solar PV



The Solar PV generating capacity is spread more evenly across the Local Authorities in Scotland. However, Aberdeenshire holds the largest share, at 11.6%, followed by Perth & Kinross (6.4%).

Economic Impacts: 2024

The below is a snapshot of the contribution of all renewable energy projects across Scotland in 2024. This is measured in terms of jobs, capital investment and employment related GVA.

Onshore Wind

979 Construction-related FTE jobs created

6,209 Operation-related FTE jobs

£976 million of direct capital investment

£512 million of employment-related GVA

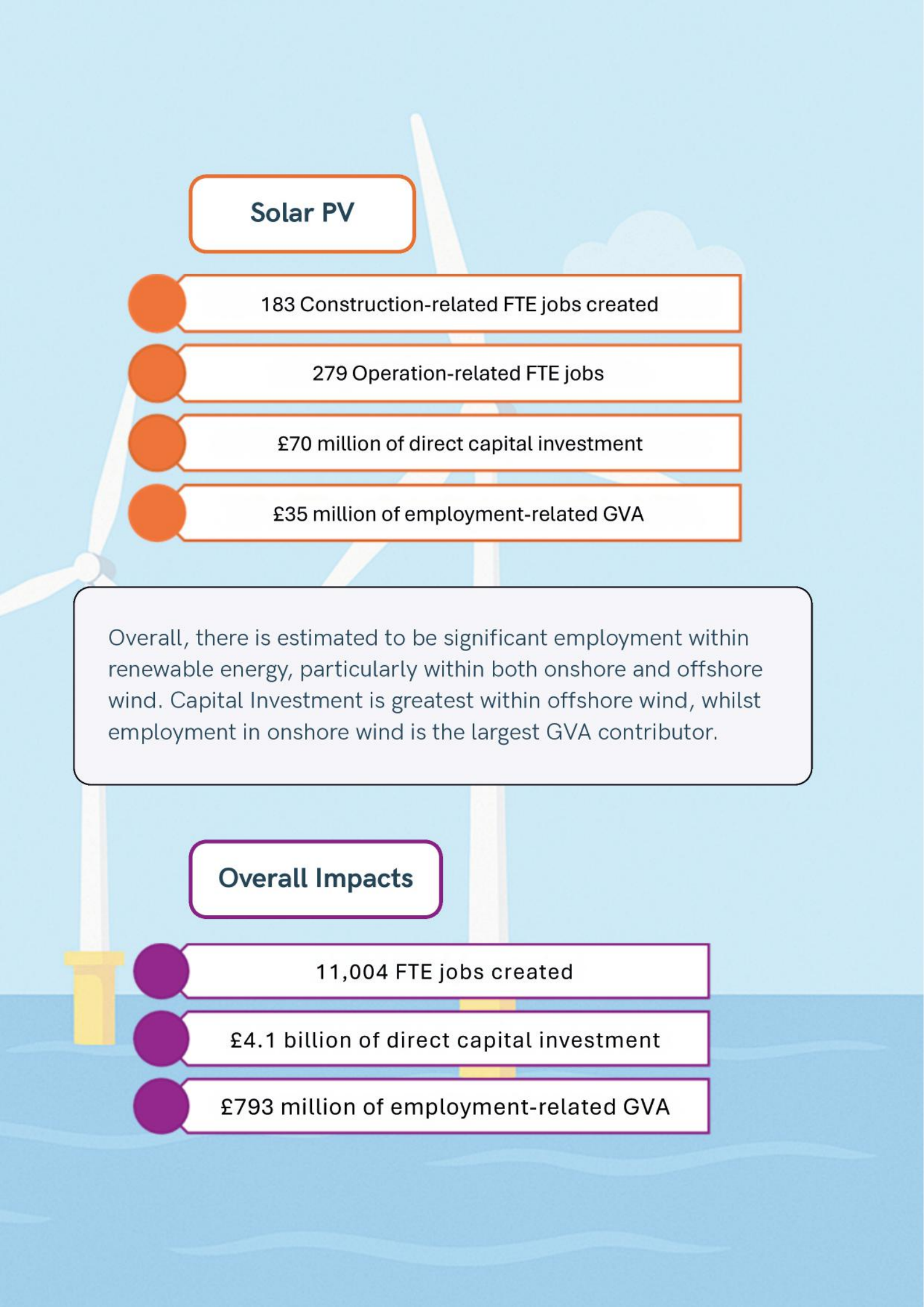
Offshore Wind

907 Construction-related FTE jobs created

2,446 Operation-related FTE jobs

£3.1 billion of direct capital investment

£246 million of employment-related GVA



Solar PV

183 Construction-related FTE jobs created

279 Operation-related FTE jobs

£70 million of direct capital investment

£35 million of employment-related GVA

Overall, there is estimated to be significant employment within renewable energy, particularly within both onshore and offshore wind. Capital Investment is greatest within offshore wind, whilst employment in onshore wind is the largest GVA contributor.

Overall Impacts

11,004 FTE jobs created

£4.1 billion of direct capital investment

£793 million of employment-related GVA

Economic Impacts: 2035

The below is a snapshot of the estimated renewable energy economic impact in Scotland in 2035 and is based on our forward projections using trends observed between 2011 and 2024.

Onshore Wind

696 Construction-related FTE jobs created

9,889 Operation-related FTE jobs

£864 million of direct capital investment

£731 million of employment-related GVA

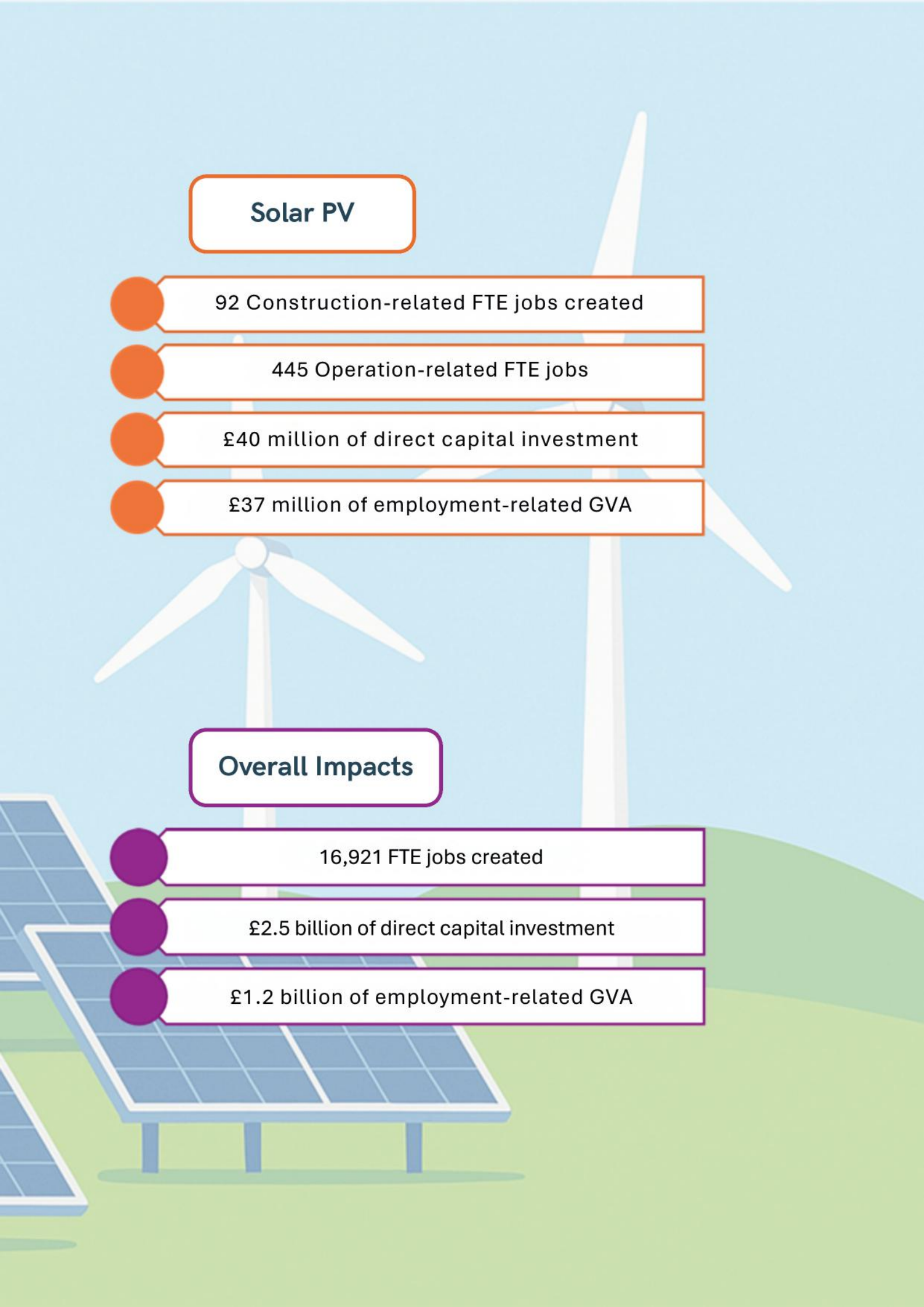
Offshore Wind

421 Construction-related FTE jobs created

5,377 Operation-related FTE jobs

£1.6 billion of direct capital investment

£401 million of employment-related GVA



Solar PV

92 Construction-related FTE jobs created

445 Operation-related FTE jobs

£40 million of direct capital investment

£37 million of employment-related GVA

Overall Impacts

16,921 FTE jobs created

£2.5 billion of direct capital investment

£1.2 billion of employment-related GVA

Economic Impacts: 2024-2035

The values shown below represent the estimated additional employment generated within the wind and solar sectors between 2024 and 2035.

Onshore Wind

7,852 Construction-related FTE jobs created

3,680 Additional operation-related FTE jobs

£6.4 billion of additional direct capital investment

£922 million of additional employment-related GVA

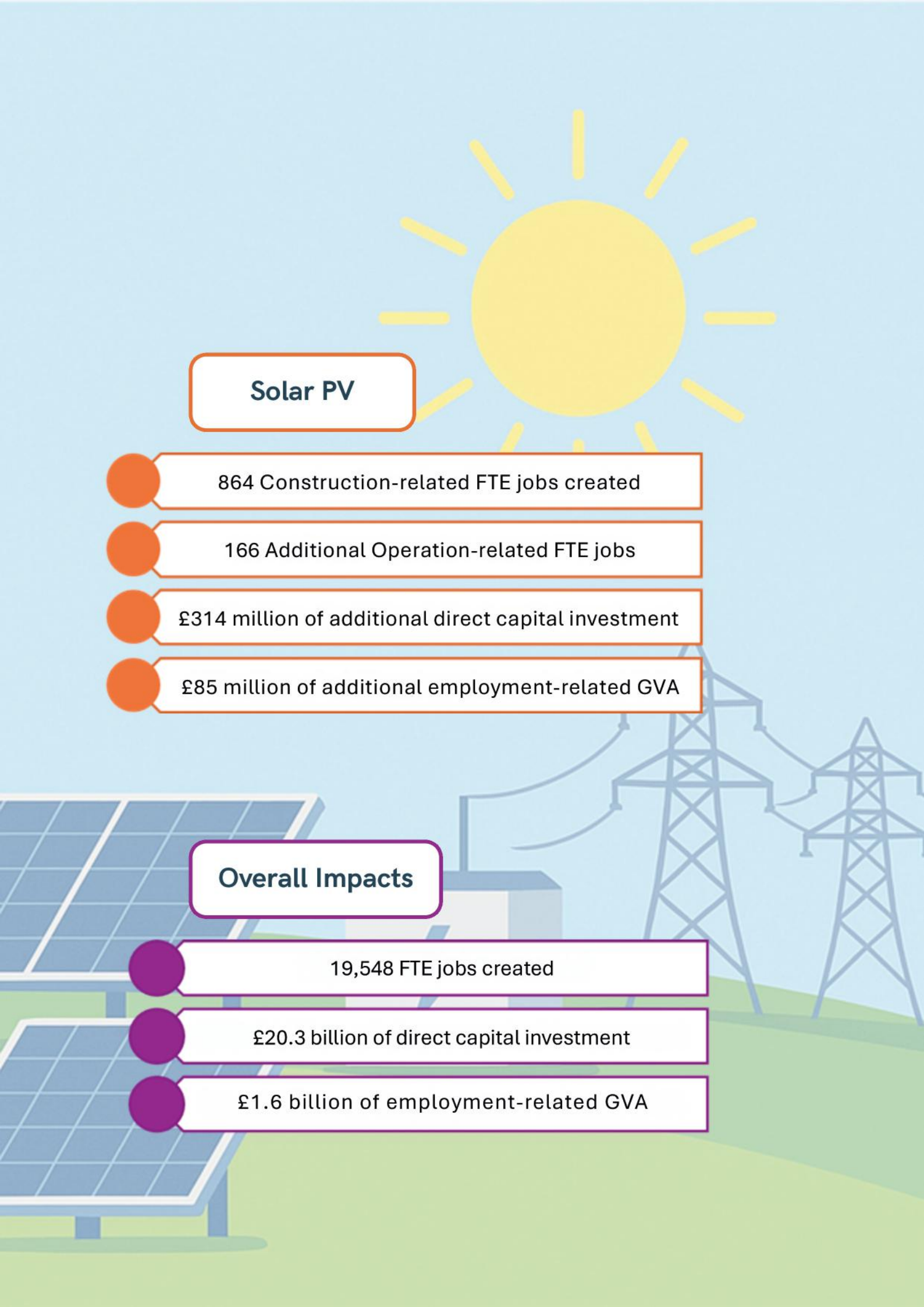
Offshore Wind

4,055 Construction-related FTE jobs created

2,931 Additional operation-related FTE jobs

£13.6 billion of additional direct capital investment

£547 million of additional employment-related GVA



Solar PV

864 Construction-related FTE jobs created

166 Additional Operation-related FTE jobs

£314 million of additional direct capital investment

£85 million of additional employment-related GVA

Overall Impacts

19,548 FTE jobs created

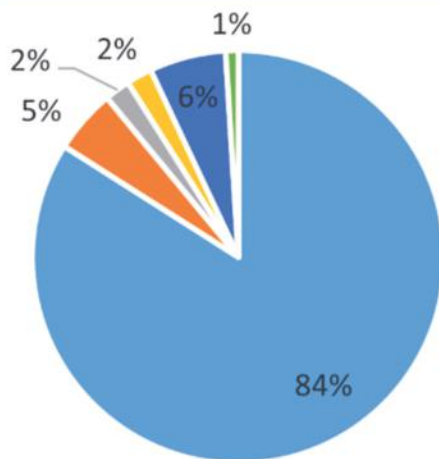
£20.3 billion of direct capital investment

£1.6 billion of employment-related GVA

Construction Phase Workers

The below data looks at the additional construction jobs that will be created between 2024 and 2035 and splits them into different sectors to assess where skills and training could be targeted and where jobs will be created.

Onshore Wind



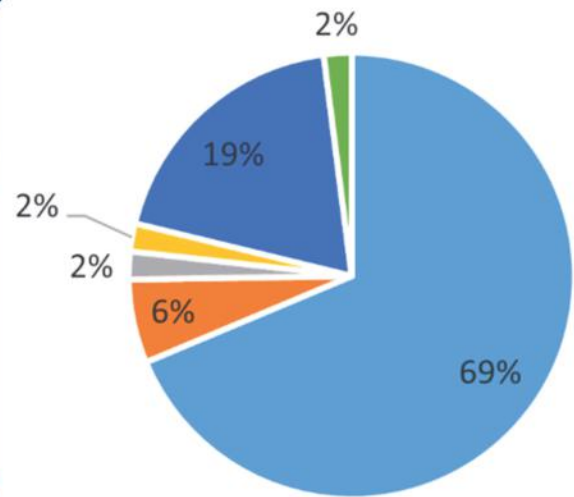
84% of employment is anticipated to be within 'Construction and Manufacturing'. This equates to 6,595 FTE jobs between 2024-2035. Professional services and Wholesale and retail trade services account for 6% and 5% of construction-related employment, respectively.

- Construction & Manufacturing
- Transport & comms
- Professional Services

- Wholesale, retail, etc
- Financial Services
- Other

Offshore Wind

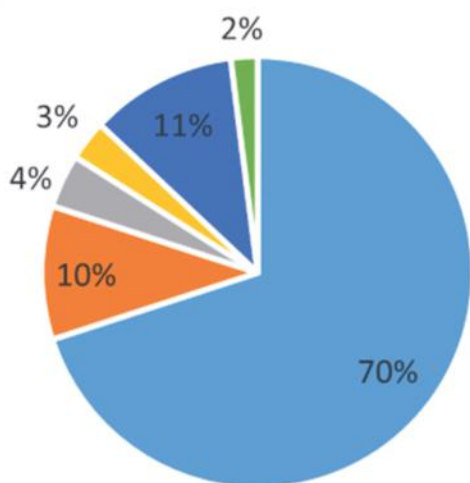
For offshore wind projects employment within 'Professional services' holds a larger share of employment (19%), equivalent to 778 FTE jobs between 2024-2035.



Solar PV

Construction and Manufacturing holds the largest share of employment related to the solar PV construction phase (70%), equivalent to 605 FTE jobs between 2024-2035.

Professional services and Wholesale and retail trade services account for 11% and 10% of construction-related employment, respectively.



Fiscal Benefits

Renewable energy installations generate fiscal benefits throughout the economy. Several key themes for maximising these benefits are highlighted below.

Economic
Growth &
Job
Creation

Increased
Gross Value
Added

Reduced
External
Costs

Fiscal
Policy &
Community
Resilience

Government Policy & Regulatory Environment

Long-term policies, clear targets, and supportive incentives provide certainty and encourage steady investment.

Integration with Broader Energy and Environmental Goals

Aligning renewable projects with national aims for energy security, emission reductions, and sustainability strengthens overall fiscal and environmental outcomes.



Infrastructure and Grid Modernisation

Upgraded transmission networks and smart grid technologies are vital for handling the variable output of renewable sources.

Economic and Investment Factors

Accessible, stable financing and attractive investment climates, bolstered by long-term contracts, are crucial for large-scale project funding.

Supply Chains and Resource Availability

Resilient and diversified local supply chains ensure a steady flow of components and materials, mitigating risks from global disruptions.

Public Acceptance and Community Engagement

Active community involvement and visible local benefits, like job creation, help smooth project development and build broad support.

Technological Innovation and Cost Competitiveness

Continued improvements in wind turbines, solar panels, and storage technologies drive down costs and enhance system efficiency.

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**Renewable Energy &
Infrastructure**



**Economics &
Social Impact**



Third **Revolution** Projects

Third Revolution Projects is a London based planning and development consultancy.
We bring creativity and big picture thinking to strategic planning for places and infrastructure



RTPI
Chartered Town Planners

