



AIB Green Bond Impact Report – FY2022

March 2023

Version control:

Revised 13 March 2023

AIB Green Bond Impact Report

*In accordance with the ICMA Harmonized Framework for Impact Reporting¹
(based on the portfolio approach)*

Portfolio Date: 31 December 2022

In accordance with the AIB Green Bond Framework² dated October 22, this document provides:

1. A description of the Eligible Green Projects;
2. The breakdown of the Eligible Green Projects by nature of what is being financed;
3. Metrics regarding Eligible Green Projects' environmental impacts.

1. Description of Green Projects

AIB, at its discretion but in accordance with the ICMA Green Bond Principles³, will allocate the net proceeds of the Green Bonds issued under the Framework, to a loan portfolio of new and existing loans in certain Eligible Green Categories.

➤ Eligible Green Categories:

- **Green Commercial Buildings:** Loans to finance or refinance development, construction, operation, and maintenance of:

Green Commercial Buildings in Ireland:

- a) Existing commercial buildings built up to and including 31st December 2020, belonging to the top 15% low carbon buildings in the local context⁴;
- b) New commercial buildings built from 1st January 2021 onwards, that have a primary energy demand at least 10% lower than what is required by the local Nearly Zero-Energy Building (NZEB) regulation⁵ ⁶;
- c) Refurbished commercial buildings with at least a 30% improvement in energy efficiency⁷:
When such an improvement is derived from BER labels, a minimum floor of a "C3" BER label will be implemented.

Green Commercial Buildings in the UK:

- a) New or existing commercial buildings in the UK, belonging to the top 15% low carbon

¹ [Harmonised-Framework-for-Impact-Reporting-Green-Bonds_June-2022v2-020822.pdf \(icmagroup.org\)](https://icmagroup.org/impact-reporting/green-bonds)

² <https://aib.ie/content/dam/frontdoor/investorrelations/docs/debt-investors/green-bonds/aib-green-bond-framework.pdf>

³ [Green-Bond-Principles_June-2022-280622.pdf \(icmagroup.org\)](https://icmagroup.org/green-bond-principles)

⁴ Based on publicly issued governmental statistical data, Irish commercial buildings with BER rating of A, B1 and B2 are in scope (see methodology document [here](#)). Buildings purchased or leased in Ireland from 2015 by a public body are also considered part of the top 15%, as these are required by regulation to have BER label "B2" and better.

⁵ For the acquisition of buildings where the building is a large non-residential building with an effective rated output for heating systems, systems for combined air conditioning and ventilation of over 290 kW it is efficiently operated through energy performance monitoring assessment. And for the construction of new buildings larger than 5000m², upon completion, the building resulting from the construction undergoes testing for air-tightness and thermal integrity, and any deviation in levels of performance set at the design stage or defects in the building envelope are disclosed to investors and clients. As an alternative; where robust and traceable quality control processes are in place during the construction process this is acceptable as an alternative to thermal integrity testing. Also for the construction of new buildings larger than 5000m², the life cycle Global Warming Potential of the building resulting from the construction has been calculated for each stage in the life cycle and is disclosed to investors on demand.

⁶ In line with the [EU EPBD directive](#), Ireland carries out a cost optimal analysis to define NZEB requirements. AIB will calculate the NZEB-10% threshold as per the official cost optimal analysis, as published by the Department of Housing, Local Government and Heritage. At the time of writing, the cost optimal analysis for residential and non-residential buildings can be found [here](#) and [here](#), respectively.

⁷ Or alternatively, renovation complying with applicable requirements for major renovations as set in the applicable national and regional building regulations for 'major renovation' implementing Directive 2010/31/EU.

buildings in the local context (i.e. England & Wales, Scotland and Northern Ireland)^{8 9};

- b) Refurbished commercial buildings in the UK with a least a 30% improvement in energy efficiency¹⁰:

When such an improvement is derived from EPC labels, a minimum floor will be implemented for the considered building. The floor will be one step below the lowest defined threshold to be part of the top 15% in the local context¹¹.

Green Commercial Buildings in Ireland and the UK:

- a) New or existing commercial buildings which received at least one or more of the following classifications:
 - BREEAM 'Excellent' or higher
 - LEED 'Gold' or higher
 - DGNB 'Gold' or higher
- **Green Residential Buildings:** Loans to finance or refinance development, construction, operation, and maintenance of:

Green Residential Buildings in Ireland:

- a) Existing residential buildings built up to and including 31st December 2020, belonging to the top 15% low carbon buildings in the local context¹²;
- b) New residential buildings built from 1st January 2021 onwards, that have a primary energy demand at least 10% lower than what is required by the local Nearly Zero-Energy Building (NZEB) regulation^{13 14};
- c) Refurbished residential buildings with at least a 30% improvement in energy efficiency¹⁵:
When such an improvement is derived from BER labels, a minimum floor of a "C3" BER label will be implemented.

- **Renewable Energy:** Loans to finance or refinance equipment, development, manufacturing, construction, operation, distribution and maintenance of renewable energy generation.

Renewable Energy assets in Ireland, the UK, across the EEA, and the USA:

⁸ Based on publicly issued governmental statistical data, English and Welsh commercial buildings with EPC rating of A+, A and B are in scope. Scottish commercial buildings with EPC rating of Climate Neutral ("CN"), A and B are in scope. See methodology document [here](#).

⁹ In accordance with the EU Climate Delegated Act, buildings built from the 1st January 2021 should meet the 'NZEB – 10%' criterion, meaning that the net primary energy demand of the buildings must be at least 10% lower than the primary energy demand resulting from the relevant NZEB requirements. In the UK, a definition for what constitutes a 'NZEB' is unclear currently; this is likely to remain the case in the future, given the UK has left the EU.

¹⁰ Or alternatively, renovation complying with applicable requirements for major renovations as set in the applicable national and regional building regulations for 'major renovation' implementing Directive 2010/31/EU.

¹¹ Based on publicly issued governmental statistical data, this would correspond to a "C" label in England & Wales and Scotland.

¹² Based on publicly issued governmental statistical data, Irish residential buildings with BER rating of A, B1 and B2 are in scope, corresponding to buildings completed from 2015 (see methodology document [here](#)).

¹³ For the acquisition of buildings where the building is a large non-residential building with an effective rated output for heating systems, systems for combined air conditioning and ventilation of over 290 kW it is efficiently operated through energy performance monitoring assessment. And for the construction of new buildings larger than 5000m², upon completion, the building resulting from the construction undergoes testing for air-tightness and thermal integrity, and any deviation in levels of performance set at the design stage or defects in the building envelope are disclosed to investors and clients. As an alternative; where robust and traceable quality control processes are in place during the construction process this is acceptable as an alternative to thermal integrity testing. Also for the construction of new buildings larger than 5000m², the life cycle Global Warming Potential of the building resulting from the construction has been calculated for each stage in the life cycle and is disclosed to investors on demand.

¹⁴ In line with the [EU EPBD directive](#), Ireland carries out a cost optimal analysis to define NZEB requirements. AIB will calculate the NZEB-10% threshold as per the official cost optimal analysis, as published by the Department of Housing, Local Government and Heritage. At the time of writing, the cost optimal analysis for residential and non-residential buildings can be found [here](#) and [here](#), respectively.

¹⁵ Or alternatively, renovation complying with applicable requirements for major renovations as set in the applicable national and regional building regulations for 'major renovation' implementing Directive 2010/31/EU.

- a) Solar Energy: Photovoltaics (PV), concentrated solar power (CSP) and solar thermal facilities;
- b) Wind Energy: Onshore and offshore wind energy generation facilities and other emerging technologies;
- c) Geothermal Energy: Geothermal power plants with life cycle emissions lower than 100g CO₂e/kWh;
- d) Power Storage Facilities: Compressed air, flywheels, synchronous condensers and batteries;
- e) Energy Transmission Infrastructure: Interconnectors between transmission systems, provided that the systems meet one of the following criteria:
 - a. The system is the interconnected European system, i.e. the interconnected control areas of Member States, Norway, Switzerland and the United Kingdom, and its subordinated systems
 - b. More than 67% of newly enabled generation capacity in the system is below the generation threshold value of 100gCO₂e/kWh measured on a life cycle basis in accordance with electricity generation criteria, over a rolling five-year period
 - c. The average system grid emission factor, calculated as the total annual emissions from power generation connected to the system, divided by the total annual net electricity production in that system, is below the threshold value of 100gCO₂e/kWh measured on a life cycle basis in accordance with electricity generation criteria, over a rolling five-year period

- **Clean Transportation:**

Zero emissions vehicles and supporting infrastructure:

- a) Fully electric, hydrogen or otherwise zero emissions vehicles for the transportation of passengers;
- b) Infrastructure to support zero emissions vehicles including but not limited to EV charging and hydrogen fuelling stations.

➤ **Contribution to EU Environmental Objectives:**

Eligible Projects substantially contribute to the achievement of the **EU Environmental Objective n. 1: Climate Change Mitigation**¹⁶

- Improving energy efficiency (1b), except for power generation activities using solid fossil fuels, at all stages of the energy chain, in order to reduce primary and final energy consumption, as referred to in Article 19(3);
- Generating, transmitting, storing, distributing or using renewable energy in line with Renewable Energy Directive (EU) 2018/2001, including through using innovative technology with a potential for significant future savings or through necessary reinforcement or extension of the grid (1a);
- Establishing energy infrastructure required for enabling the decarbonisation of energy systems (1g); and
- Increasing clean or climate-neutral mobility (1c).

¹⁶ Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 Jun 2020. On the establishment of a framework to facilitate sustainable investment – ‘Taxonomy Regulation’, see [here](#).

➤ **Alignment with the UN Sustainable Development Goals (UN SDGs):**

Green Bonds issued under this Green Bond framework directly advance the following SDGs:

- SDG 7: Affordable and Clean Energy (Target 7.1, 7.2, 7.3)
- SDG 9: Industry, Innovation and Infrastructure (Target 9.4)
- SDG 13: Climate Action (Target 13.1)



2. Breakdown of Green projects by nature of what is being financed

AIB's Eligible Green Project Portfolio is composed of financial assets (eligible loans), selected in accordance with the Eligibility Criteria set out in the Framework.

3. Metrics regarding projects' environmental impacts: Portfolio based green bond report in accordance with the ICMA Harmonized Framework for Impact Reporting (June 2022)

AIB has relied on models and methodologies created by specialised consultant Carbon Trust¹⁷ to assess the impact of the Eligible Green categories, together forming the Eligible Green Project Portfolio.

The Eligible Green Project Portfolio is assessed regarding the following environmental impacts:

- **Green Buildings:**
 - Estimated annual energy consumption (in MWh/year) and estimated annual avoided energy consumption (in MWh/year)
 - Estimated annual avoided emissions (tCO₂/year)
- **Renewable Energy:**
 - Total installed capacity (in MW)
 - Estimated annual avoided emissions (tCO₂/year)
- **Clean Transportation:**
 - Annual GHG emissions avoided (tCO₂/year)
 - Number of battery electric vehicles/Fleets (BEVs) deployed

¹⁷ The Carbon Trust Impact Methodology can be found at: <https://aib.ie/investorrelations/debt-investor/green-bonds/supporting-documents>

Portfolio Date: 31 December 2022¹⁸

Eligible ICMA Project Category	Number of Eligible Projects/Buildings	Eligible Portfolio (EUR)	Share of Total Financing	Eligibility for Green Bonds	Estimated Annual Avoided Emissions (tCO ₂)	Total Installed Capacity (MW)	Estimated Annual Energy Consumption (MWh)	Estimated Annual Avoided Energy Consumption (MWh)
a/		b/	c/	d/	e/	f/	g/	h/
Green Buildings	4577	2,676,504,866	57.1%	100%	40,375	-	50,878	133,111
Commercial Real Estate		1,538,567,391	32.8%	100%	29,330	-	40,914	87,174
Mortgages		1,137,937,475	24.3%	100%	11,045	-	9,964	45,937
Clean Transportation	1327	33,134,148	0.7%	100%	493	-	1,459	-
Renewable Energy	159	1,976,950,470	42.2%	100%	1,095,536	3,124	-	-
Energy Generation		1,899,882,089	40.5%	100%	1,092,214	1,199	-	-
Energy Storage		29,970,010	0.6%	100%	3,073	21	-	-
Energy Transmission		47,098,371	1.0%	100%	250	1,904	-	-
Total	6063	4,686,589,484	100%	100%	1,136,405	3,124	52,337	133,111

Portfolio based on Green Bond Report in accordance with the ICMA Harmonized Framework for Impact Reporting (June 2022)

a/ Eligible Category

b/ Signed amount represents the amount legally committed by the issuer for the portfolio or portfolio components eligible for Green Bond Financing

c/ This is the share of the total portfolio cost that is financed by the issuer per Eligibility Category

d/ This is the share of the total portfolio costs that is eligible for Green Bond issuances

e/ f/ g/ h/ impact indicators:

- Estimated annual avoided emissions (tCO₂)
- Total installed capacity (MW)
- Estimated annual energy consumptions (KWh)
- Estimated annual avoided energy consumption (kWh)

¹⁸ Combined impacts of operational and non-operational projects portfolio, as of December 31, 2022:
Operational Eligible Portfolio EUR 3,494,149,859, AIB Attributed Annual Avoided Emissions 896,752 (tCO₂/year)
In-Development Eligible Portfolio EUR 1,192,439,625, AIB Attributed Annual Avoided Emissions 239,653 (tCO₂/year)

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