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Second Party Opinion And European Green Bond Pre-Issuance Review

Crédito Agrícola's Green, Social and Sustainability Bond Framework

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Location: Portugal

Sector: Banks

Alignment Summary

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✗

- ✓ Social Bond Principles, ICMA, 2023
- ✓ Social Loan Principles, LMA/LSTA/APLMA, 2023
- ✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)
- ✓ Green Loan Principles, LMA/LSTA/APLMA, 2023
- ✓ Sustainability Bond Guidelines ICMA, 2021

See [Alignment Assessment](#) for more detail.

Strengths

Operating in the Portuguese market and maintaining strong ties to rural communities through its cooperative structure enables Credito Agricola to better understand the needs of its local stakeholders. Proximity enables the bank to finance projects that address material social issues--such as education and health care development, and social housing--as well as support micro, small, and midsize enterprises (MSMEs) in underserved regions.

Weaknesses

No weaknesses to report.

Areas to watch

The bank's physical risk considerations are reasonably nascent. Its physical risk assessments are currently just informational, but the bank plans to integrate them into its credit decision making by 2025.

What projects might be eligible under the livestock farming sub-category remains unclear. While the bank has said it will not directly finance emissions-intensive livestock agriculture, livestock might be indirectly supported via the funding of geospatial data tools for livestock management.

While the issuer commits to the EU Taxonomy criteria for climate mitigation when financing transmission projects, it is unclear if it will adhere to the 100 gCO₂e/kWh threshold.

Transmission assets in Portugal automatically meet the Taxonomy's first criterion through their connection to the European grid, which bypasses climate-related thresholds. But with 23.8% of Portugal's electricity sourced from oil and gas, the grid remains carbon-intensive, and the issuer does not formally exclude financing connections to fossil fuel-based generation projects.

Shades of Green Projects Assessment Summary

Over the three years following issuance of the financing, Crédito Agrícola expects to allocate 90% of proceeds to eligible social projects and 10% to green projects. Visibility on the actual distribution of proceeds between categories is limited at this stage, which is typical for banks that have financing frameworks with many project categories. The allocation between financing new projects and refinancing existing projects is also unclear at this stage.

Renewable energy

 Dark to Medium green

Manufacture of renewable energy technologies

Manufacture of equipment for the production and use of hydrogen (any equipment used for production of hydrogen fulfilling the criteria listed below for "Manufacture of hydrogen").

Manufacture of hydrogen (verified life-cycle GHG emissions savings meet Taxonomy's criteria).

Construction or operation of electricity generation facilities that produce electricity using/from solar photovoltaic (PV) or concentrated solar power (CSP), wind power, ocean energy, hydropower (power density > 5 W/m² or life-cycle GHG emissions intensity < 100gCO₂e/kWh).

Construction and operation of transmission systems that transport electricity on the extra high-voltage and high-voltage interconnected system and on high-voltage, medium-voltage and low-voltage distribution systems.

Energy storage: facilities that store electricity and return it at a later time in the form of electricity or in the form of thermal energy or other energy vectors.

Energy storage: facilities that store hydrogen and return it at a later time.

Green buildings

 Light green

Development of building projects for residential and non-residential buildings with Portuguese EPC with level A+ or A.

Renovation of buildings to improve energy performance and efficiency, for instance a reduction of primary energy demand (PED) of at least 30% or an improvement on EPC certificate level (minimum EPC level B).

Manufacture of energy-efficiency equipment for buildings (products and their key components fulfilling the Taxonomy Technical Screening Criteria [TSC]).

Installation, maintenance, or repair of energy-efficiency equipment, charging stations for electric vehicles, and instruments and devices for measuring, regulating, and controlling the energy performance of buildings.

Professional services related to energy performance of buildings.

Clean mobility

 Dark to Medium green

Manufacturing, repairing, maintenance, retrofitting, repurposing, and upgrading low carbon transport vehicles and personal mobility devices, rail rolling stock, and vessels that have zero direct (tailpipe) CO₂ emissions

Manufacture of rechargeable batteries, battery packs and accumulators, battery components (battery active materials, battery cells, casings and electric components) for transport, stationary and off-grid energy storage, and other industrial applications.

Recycling of end-of-life batteries.

Purchase, financing, rental, leasing, and operation of railway rolling stock, urban and suburban transport vehicles, and road passenger transport.

Purchase, financing, leasing, rental, and operation of road or freight transport on mainline rail networks as well as short-line freight railroads.

Purchase, financing, renting, leasing, and operation of personal mobility or transport devices with propulsion from zero-emissions motor and/or physical activity of the user.

Construction, modernisation, maintenance, and operation of infrastructure for any relevant supporting infrastructure for personal mobility (such as pedestrian and bicycle infrastructure) and public, passenger and freight transport (such as railways, subways, rail service facilities, infrastructure dedicated to transshipment).

Energy efficiency


 Light green

Manufacture of technologies aimed at substantial GHG emission reductions.

Development or use of ICT solutions that are aimed at collecting, transmitting, and storing data and at its modelling and use where those activities are predominantly aimed at the provision of data and analytics that enable GHG emission reductions.

Research, applied research, and the experimental development of solutions, processes, technologies, business models, and other products dedicated to the reduction, avoidance, or removal of GHG emissions

Forest

 Medium green

Manufacture of technologies aimed at substantial GHG emission reductions.

Data-driven solutions for GHG emissions reductions (development or use of Information Communications Technology [ICT] solutions to collect, transmit, store, model, or use data to enable GHG emission reductions).

Research, development, and innovation (solutions, processes, technologies, business models and other products dedicated to the reduction, avoidance, or removal of GHG emissions).

Productive land use

 Light green

Rehabilitation of degraded lands with native and/or naturalized species.

Reduction in synthetic fertilizer use by at least 20% on project implementation to reduce downstream eutrophication, and to promote the use of biofertilizer and other organic solutions.

Reduction in pesticide use by at least 20% on project implementation and the promotion of biosolutions.

Switching from monocropping to diversified cropping systems, including intercropping and the use of cover crops to improve resilience and soil quality.

Adoption of sustainable agricultural practices/varieties/technology and/or infrastructure that increases crop yields/quality on existing land without increasing the environmental footprint.

Design, implementation, use, or improvement of traceability mechanisms, data, and technologies used to prevent deforestation and monitor biodiversity benefits at the corporate level or along the supply chain.

Adoption of efficient irrigation solutions.

Adoption of farming and grazing practices that, among other benefits, rebuild soil organic matter, restore degraded soil biodiversity, enhance and maintain ecosystem function, and preserve native seed and livestock varieties; sustainable fiber production and other activities that focus on recuperation of the ecosystem through improved land management and that operate throughout the supply chain.

Adoption of innovation and technologies that improve land-use and agricultural practices, such as geospatial data tools and tools to detect soil degradation.

See [Analysis Of Eligible Projects](#) for more detail.

Issuer Sustainability Context

This section provides an analysis of the issuer's sustainability management and the embeddedness of the financing framework within its overall strategy.

Company Description

Crédito Agrícola Group (the group) is a Portuguese cooperative banking group comprising Caixa Central de Crédito Agrícola Mútuo (Caixa Central) and 67 affiliated local banks (Caixas de Crédito Agrícola Mútuo). Caixa Central provides oversight and coordination, while the affiliated banks operate with local autonomy, focusing on retail, commercial, and corporate banking services. The group has a strong presence in rural areas, with key activities including retail banking, agricultural financing, and renewable energy projects. As of Sept. 30, 2024, the group's consolidated assets amounted to €26.6 billion and its consolidated net income was €347 million. Retail banking is the primary contributor to its operations.

Material Sustainability Factors

Climate transition risk

Banks are highly exposed to climate transition risk through their financing of economic activities, which impact the environment. Policies and rules to reduce emissions could raise credit, legal, and reputational risks for financial institutions. These medium- to long-term risks are significant and will be proportional to the impact of climate change on the economy. Positively, financing the climate transition offers a growth avenue for banks through lending, debt structuring, and other capital markets activities.

Physical climate risk

Physical climate risks will affect many economic activities as climate change increases the frequency and severity of extreme weather events. Banks finance a wide array of business sectors that are exposed to physical climate risks, and so are exposed via their financing activities. However, while climate change is a global issue, weather-related events are typically localized, so the magnitude of banks' exposure is linked to the geographical location of the activities and assets they finance. Portugal faces significant climate risks, including more frequent droughts, intense floods, and an increasing number of wildfires, which have caused considerable damage in recent years. Rising sea levels threaten the country's extensive coastline, endangering coastal communities and infrastructure. These changes pose challenges to key sectors such as agriculture and tourism, highlighting the urgency of effective adaptation measures.

Biodiversity and resource use

Banks contribute to significant resources use and biodiversity impacts through the activities they fund or invest in. For example, the construction sector—which is a major recipient of bank financing—is a large consumer of raw materials such as steel and cement. Similarly, bank-financed agricultural activities can have material biodiversity impacts. Portugal faces biodiversity risks due to habitat loss, deforestation, and the effects of climate change, such as droughts and wildfires. These factors threaten native species and ecosystems, particularly in coastal and forested regions, requiring enhanced conservation and sustainable land management efforts.

Access and affordability

Banks' widespread influence on society and the economy stems from their role in enabling access to financial services to individuals and businesses, and in ensuring the correct functioning of payments systems, which are cornerstones of economic development and stability. In most countries, unbanked and underserved population segments are still meaningful, although the access gap is most acute in emerging economies. Market imperfections such as low competition, incomplete information, and lack of financial literacy often result in costly alternatives for small businesses and low-income people, so ensuring affordable access to financial services, especially to the most vulnerable, remains a challenge for the banking industry. New technologies

will, however, increasingly enable banks to close this gap through cost efficiencies and product innovation. While structural issues such as poverty, informality, and lack of financial literacy partly limit access to financial services, banks have extensive opportunities to support economic development through financial inclusion.

Impact on communities

Banks can address a wide range of community issues by providing economically vulnerable groups with access to financing. This can help alleviate income inequality and foster upward social mobility. The realization of these objectives hinges on banks' responsible lending practices. These include transparent contractual terms, financial education programs, and support for borrowers encountering unexpected financial hardships. By contrast, obscure loan terms or predatory lending practices can exacerbate existing socioeconomic disadvantages in the customer base. By actively addressing such concerns, banks can access new markets, achieve better financial performance, attract top talent, and mitigate reputational and regulatory risk.

Issuer And Context Analysis

Crédito Agrícola's green, social, and sustainability framework includes a range of project categories designed to address environmental and social issues in Portugal. Green projects focus on expanding renewable energy capacity, improving energy efficiency, and supporting clean mobility solutions. Other areas include sustainable land use and forest management. Social projects aim to enhance access to essential services, foster socioeconomic development, and empower communities, particularly in underserved regions. These initiatives contribute to Portugal's commitments under the Paris Agreement, including the country's target to achieve carbon neutrality by 2045.

Crédito Agrícola has committed to achieving net-zero greenhouse gas emissions by 2050, as outlined in its Net Zero Transition Plan. The bank calculates scope 1, 2, and 3 emissions and has already incorporated financed emissions into its scope 3 reporting. However, details of scope 3, including financed emissions, have not yet been made public. As part of its efforts, the bank has set emissions reduction targets for key sectors within its loan portfolio, including agriculture, real estate, energy, automotive, aviation, hospitality, and waste management. These targets demonstrate a commitment to addressing sector-specific climate impacts by 2030. Additionally, the bank supports its affiliated banks—Caixa Central and Caixas de Crédito Agrícola Mútuo—through sustainability ambassadors, who provide technical support, organize training programs, and facilitate strategic meetings to implement the sustainability strategy. Crédito Agrícola also says that it uses a corporate business intelligence tool to monitor sustainability key performance indicators (KPIs), including metrics for green and social financing, ensuring consistent tracking of progress toward environmental objectives.

Crédito Agrícola's integration of physical climate risks into its risk management is nascent. The bank uses scenario analysis informed by frameworks such as the ECB's 2022 Climate Risk Stress Test and NGFS (Network for Greening the Financial System) scenarios to assess impacts, including client risk profile deterioration, macroeconomic shifts, and climate-related effects on real estate collateral. Current measures, such as environmental and social ratings from client questionnaires, are primarily informational and support credit deliberations but do not yet directly influence lending decisions. Significant climate hazards, including wildfires, droughts, and heatwaves, pose risks to financed assets, especially in rural areas, where past wildfires have caused substantial damage to residences, warehouses, and forested areas. The integration of physical climate risk assessments into the credit granting process is planned for 2025, supported by the SIBS ESG ecosystem solution. This is a platform that helps companies streamline ESG data management and reporting to improve risk signaling and mitigation strategies. While these efforts demonstrate progress, the framework is still in its early stages of development.

Crédito Agrícola incorporates biodiversity into its ESG questionnaires, but it is not yet factored into credit decisions. Furthermore, the bank involves clients in sustainability-related initiatives, including programs that promote climate-friendly farming practices, such as regenerative agriculture, which aims to restore soil health and enhance biodiversity. Although the

bank indicates that its business intelligence tool is used to monitor environmental and social KPIs, its specific application to biodiversity-related KPIs remains unclear.

Crédito Agrícola leverages its cooperative structure and extensive local presence to enhance financial access and affordability, particularly in underserved regions. With 618 branches nationwide, the bank reinvests profits into operations and community initiatives, supporting economic development and financial inclusion. In 2023, Crédito Agrícola introduced financing solutions tailored to rural households and MSMEs, alongside donations and sponsorships for cultural, educational, and environmental projects, reflecting its alignment with community needs.

Alignment Assessment

This section provides an analysis of the framework's alignment with the Social and Green Bond/Loan principles and the Sustainability Bond Guidelines.

Alignment Summary

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✗

- ✓ Social Bond Principles, ICMA, 2023
- ✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)
- ✓ Sustainability Bond Guidelines ICMA, 2021

✓ Use of proceeds

We assess all the framework green project categories as having a green shade and consider all social project categories to be aligned with the requirements of the Social Bond Principles. The issuer commits to allocate the amount equivalent to net proceeds issued under the framework exclusively to either eligible green or eligible social projects. Please refer to the Analysis of Eligible Projects section for more information on our analysis of the environmental and social benefits of the expected use of proceeds. In addition, the issuer confirms that its sustainable debt instruments are limited exclusively to bond issuances. However, the look-back period is not disclosed, which limits our insight into the projects' additionality.

✓ Process for project evaluation and selection

The framework outlines the process that Crédito Agrícola has developed to evaluate and select potential projects, with environmental and social objectives clearly outlined for all project categories. The Sustainability Office is in charge of reviewing the pool of eligible environmental and social assets included and identified in the portfolio, by business area, while the Sustainability Council will meet at least quarterly and will oversee the selection process. The company has integrated processes to identify and manage environmental and social risks related to eligible projects, which includes applying standard credit risk analysis as well as ESG risk analysis. Moreover, the issuer provides an exclusion list under the framework.

✓ Management of proceeds

Crédito Agrícola commits to track the net proceeds from instruments issued under its framework and allocate them within 36 months after the issuance of a sustainable/green/social instrument. The issuer will aim to replace any loan that no longer meets the eligibility criteria outlined in this framework, or, in the event of asset divestment, with other projects that are in line with the eligibility criteria specified in this framework. However, the issuer does not specify within which timeframe it will occur. Pending allocation, unallocated proceeds will be held in the bank's treasury and invested according to its internal policies, in cash or other short-term and liquid instruments and whenever possible meeting SDGs criteria.

✓ Reporting

The issuer commits to report annually on the allocation of the net proceeds and on the impacts of loans financed until full allocation of the net proceeds and in case of material developments. Reporting will be available on the Investor Relations section of Crédito Agrícola's website. Allocation reporting will include the total amount of Green, Social, and Sustainability Bonds issued, the total amount of the net proceeds allocated to the portfolio by eligible category, and the balance (if any) of unallocated proceeds. The bank will report on the environmental and social impacts of the eligible green and social assets, derived to the extent possible from direct and verifiable data collection, or from estimates based on credible, scientific, and

detailed assumptions. The Sustainability Office will oversee the independent external audit process of the Allocation and Impact Report until full allocation.

Analysis Of Eligible Projects

This section provides details of our analysis of eligible projects, based on their environmental benefits and risks, using the "[Analytical Approach: Shades Of Green Assessments](#)," as well as our analysis of eligible projects considered to have clear social benefits and to address or mitigate a key social issue.

Social project categories

Access to essential services

Health care:

- Construction, refurbishment; equipment and operation of health care services such as public hospitals, clinics, and health care centers providing free-of-charge or subsidized medical care.
- Access to health care products and services by individuals.

Education:

- Construction, refurbishment, equipment, and operation of free or subsidized education facilities such as primary, secondary schools, universities and vocational training programs.
- Access to education services by individuals.

Social and affordable housing:

- Construction, refurbishment, and acquisition of affordable housing for families whose income level is below market average and do not have the financial capacity to bear the cost of access to adequate housing.
- Acquisition of affordable housing.

Analytical considerations

- This category aims to promote social inclusion and improve access to essential services and goods, such as health care, education, and housing, for the Portuguese population. By facilitating access to these services, the initiative supports wellbeing and contributes to the broader resilience of the economy.
- For the health care and education subcategories, the target population includes the “most vulnerable”, defined by OECD criteria as low-income or lower-middle-income earners, encompassing individuals earning less than 100% of the national median income. For social and affordable housing, the target population includes social housing bodies and organizations (such as local public companies responsible for the management of social housing and public housing neighborhoods) as well as individuals or families facing difficulties in accessing housing, such as people under 35 and/or those with disabilities.
- Middle-income households in Portugal face a significant risk of sliding into low-income status over time. Between 2007 and 2015, more than 20% of lower-middle-income households in Portugal fell below the low-income threshold (below 75% of the median) within four years, highlighting the vulnerability of these households to economic shifts. Moreover, low-income individuals have difficulty finding affordable health care as well as education. An inability to access early childhood education can lead to worse long-term educational and employment outcomes for low-income children. Ensuring easy access to these essential services through this financing can help provide adequate health care and education to parts of the population in need.
- The bank will ease access to health care and educational services through the financing of public or private projects (such as projects in regions lacking public provision of such services, projects that have partnerships with the public health or education system, projects that have and can prove they have programs to provide services at affordable or subsidized costs, projects of

private cooperatives) and through the provision of personal loans. Furthermore, the issuer ensures that a maximum interest rate cap is applied, which will be lower than the rates for personal loans without a specific purpose. This helps keep financing for these essential needs affordable.

- With respect to health care services, the bank does not apply a geographical criterion due to the problem of overcrowding in health services in the more privileged regions. In fact, in the Lisbon metropolitan area 25% of patients registered in health centers did not have a family doctor, whereas in the less privileged northern region it was only 2%.
- The third subcategory focuses on the construction, refurbishment, and acquisition of social and affordable housing for families with incomes below the market average. With housing affordability becoming an increasing challenge in many urban areas, particularly in Lisbon and Porto, the initiative aims to provide safe, quality housing to those who struggle to meet the costs of access to suitable homes. In a country where rising property prices and rental costs have outpaced wage growth, this project seeks to reduce housing inequality by offering options for individuals and families who otherwise cannot afford market rates. The acquisition of affordable housing further supports the goal of increasing the availability of homes for low-income groups, ensuring broader access to decent living conditions in both urban and rural settings. This initiative is aligned with the government's ongoing efforts to tackle the housing crisis and create more inclusive communities in Portugal.

Territorial socioeconomic development and protection

Underprivileged regions:

- Operation and functioning of MSMEs in underprivileged regions, fostering local growth and development, competitiveness and job preservation and creation.
- Construction and operation of infrastructures in underprivileged regions managed by local councils.

Regions impacted by crises:

- Supporting MSMEs, families and local councils of regions impacted by health crises.
- Supporting MSMEs and families of regions impacted by extreme climate events.

Analytical considerations

- Projects under the Territorial Socio-Economic Development and Protection category aim to support MSMEs, as defined by the European Commission, in underprivileged regions. These regions are identified by the issuer as having a GDP per capita below 75% of the EU average, in line with the European Regional Development Fund (ERDF) and European Social Fund (ESF) NUTS definitions.
- The bank is committed to supporting local communities, reflected in its extensive branch network in rural areas. This presence fosters financing to these populations and their businesses. With numerous employees in these regions tasked with achieving commercial loan targets, the bank ensures strong incentives to secure financing for MSMEs in underserved areas. Moreover, the bank intends to finance the construction and operation of infrastructure in the same underprivileged regions, to be managed by local councils.
- According to the Portuguese National Institute of Statistics (INE), MSMEs represent over 99% of all enterprises in Portugal. This includes the microenterprises (less than 10 employees) that represent the vast majority within this category. MSMEs account for about 72% of total private-sector employment, and these enterprises contribute to about 62% of total gross value added (GVA) in the economy, highlighting their impact on national productivity. Therefore, funding MSMEs in underprivileged regions promote employments and more generally, Portugal's growth and development.

Socioeconomic advancement and empowerment

Microfinance:

- Supporting self-employed, single-member companies and microenterprises through microfinance solutions.

Promoting equality and inclusion:

- o Empowering women.
- o Improving accessibilities.
- o Providing training for workers and businesses most exposed to the climate transition.

Non-profit organization

- o Supporting non-profit organizations that promote solidarity and the reduction of socioeconomic inequalities including through health care, financial aids, training, sports, and culture.

Analytical considerations

- This category aims to provide loans to help create and retain wealth for the self-employed, the unemployed seeking to start a business, and microenterprises while promoting equality and inclusion by empowering women, improving accessibility, and training workers affected by the climate transition. Through this, the bank seeks to promote social and economic inclusion, gender equality, accessibility for people with disabilities, a just climate transition, and economic advancement.
- As of the report date, the bank has not yet launched any microfinance products. However, it commits to consider demographic criteria (gender, age, and territorial origin) and the economic-financial criteria (such as unemployment status) of clients who wish to access the microfinance products under development. The microfinance subcategory targets the self-employed, single-member companies, microenterprises, and the unemployed who are willing to start a business.
- To promote equality and inclusion, the bank will provide loans to individuals and businesses to empower women, improve accessibility, and provide training for workers and businesses most exposed to the climate transition. The beneficiaries will include female entrepreneurs, MSMEs owned and led by women, and women with mortgages as well as individuals with disabilities and employees receiving training to adapt to the climate transition. Notably, there is a significant gender gap in access to financing in Portugal, with only 23% of women obtaining loans from traditional or digital financial institutions compared to 39% of men (according to the World Bank’s Global Findex Database). Additionally, the subcategory supports projects that enhance access to infrastructure or digital channels and fund initiatives aimed at reskilling employees in carbon-intensive sectors (energy, fossil fuels, aviation, chemical production, agriculture), equipping them with green skills to adapt to transition risks. National and supranational regulators require the bank to disclose a transition plan for these sectors under Pillar 3. These commitments will be detailed in the semi-annual market discipline report by year-end to support workers’ adaptation to the low-carbon economy.
- The third subcategory will focus on providing support to non-profit organizations that provide social support to the vulnerable (such as low-income households, the young, the elderly, and people with disabilities). To ensure compliance with eligibility criteria and social objectives, Crédito Agrícola will adapt its environmental and social rating questionnaires, used for corporate clients since 2021, for non-profit organizations. These updated questionnaires will gather demographic data on project beneficiaries and require evidence where applicable to ensure fair decision making.
- To evaluate a project’s social risks the bank carries out an ESG risk analysis. In particular, the social components involve the risks related to decent work, social protection, product/service safety and quality, consumer data protection, responsible marketing, and the promotion of sustainable and inclusive communities. It is important to mention that we have limited visibility on interest rate cap for borrowers as high debt for the category could distort payment capacity.

Green project categories

Renewable energy

Assessment

 **Dark to Medium green**

Description

- Enablers manufacturing:
- o Manufacture of renewable energy technologies.

- o Manufacture of equipment for the production and use of hydrogen (any equipment used for production of hydrogen fulfilling the criteria listed below for "Manufacture of hydrogen").
- o Manufacture of hydrogen (verified lifecycle GHG emissions savings meet Taxonomy's criteria).

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant Technical Screening Criteria (TSC) and Minimum Social Safeguards (MSS), but the assessment of Taxonomy-alignment is not carried out for the Do No Significant Harm (DNSH) requirements.

Electricity generation:

Construction or operation of electricity generation facilities that produce electricity using/ from:

- o Solar photovoltaic (PV) or concentrated solar power (CSP).
- o Wind power.
- o Ocean energy.
- o Hydropower (power density > 5 W/m² or lifecycle GHG emissions intensity < 100gCO₂e/kWh).

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant TSC and MSS, but the assessment of Taxonomy-alignment is not carried out for the DNSH requirements.

Transmission, distribution, and storage of renewable:

- o Transmission systems that transport the electricity on the extra high-voltage and high-voltage interconnected system and on high-voltage, medium-voltage, and low-voltage distribution systems.

Energy storage: facilities that store electricity and return it at a later time:

- o In the form of electricity.
- o In the form of thermal energy or other energy vectors.

Energy storage: facilities that store hydrogen and return it at a later time.

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant TSC and MSS, but the assessment of Taxonomy-alignment is not carried out for the DNSH requirements.

Analytical considerations

- Renewable energy projects such as solar PV, wind, hydropower, and ocean energy are key to limiting global warming to well-below 2°C, provided their negative impacts on the local environment, and physical risks, are sufficiently mitigated. While we assess the renewable energy production projects as Dark green under this category, we consider transmission and distribution projects to be Medium green, reflecting the overall carbon intensity of the Portuguese electricity grid. This results in an overall shade of Dark to Medium green for this category.
- Reliable and efficient electricity transmission and distribution (T&D) networks are essential for supporting electrification and decarbonization. Crédito Agrícola intends to finance these projects in line with the EU Taxonomy, which outlines three criteria for eligibility. While one of these requires compliance with a carbon intensity threshold of 100 gCO₂e/kWh, projects in Portugal automatically meet the first criterion by being part of the European interconnected grid. It is not yet clear which criterion the bank intends to follow. Notably, Portugal's grid currently exceeds the 100 gCO₂e/kWh threshold, underscoring the need for further decarbonization. This lack of clarity limits our assessment of this project to Medium green.
- We assign a Dark green shade to the financing of renewable energy generation projects from solar, wind, ocean, hydropower, and geothermal sources. Hydropower projects must meet specific criteria to ensure alignment with the EU Taxonomy SCC, such as having a power density above 5 W/m², lifecycle GHG emissions below 100 gCO₂e/kWh, or being a run-of-river plant without an artificial reservoir.

- Energy storage plays an important role in balancing the intermittency of renewable energy sources such as solar and wind. Crédito Agrícola will finance energy storage solutions, including facilities for electricity storage (like batteries or pumped hydro), thermal energy storage, and hydrogen storage. These projects will align with the EU Taxonomy's substantial contribution criteria by supporting the integration of renewable energy and improving grid stability. For hydrogen storage, the projects must complement systems utilizing low-carbon or renewable hydrogen produced in compliance with the EU Taxonomy standards.
- The issuer requires its borrowers to provide a climate risk assessment, which includes addressing physical climate risks associated with renewable energy projects. While this requirement is not yet integrated into the issuer's credit risk assessment, Crédito Agrícola plans to incorporate it by mid-2025 through the SIBS ESG ecosystem solution.

Green Buildings

Assessment

 Light green

Description

Construction of new buildings or renovation of existing.

Development of building projects for residential and non-residential buildings with Portuguese EPC with level A+ or A.

Renovation of buildings to improve energy performance and efficiency, for instance a reduction of primary energy demand (PED) of at least 30 % or an improvement on EPC certificate level (minimum EPC level B).

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant Technical Screening Criteria (TSC) and Minimum Social Safeguards (MSS), but the assessment of Taxonomy-alignment is not carried out for the Do No Significant Harm (DNSH) requirements.

Enablers manufacturing:

Manufacture of energy efficiency equipment for buildings (products and their key components fulfilling the TSC).

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant TSC and MSS, but the assessment of Taxonomy-alignment is not carried out for DNSH requirements.

Installation, maintenance, and repair of equipment, instruments, and devices:

Installation, maintenance, or repair of

- Energy efficiency equipment;
- Charging stations for electric vehicles; and/or
- Instruments and devices for measuring, regulation and controlling energy performance of buildings.

Professional services related to energy performance of buildings.

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant TSC and MSS, but the assessment of Taxonomy-alignment is not carried out for DNSH requirements.

Analytical considerations

- Energy efficiency and emissions reductions in buildings are essential to achieving net-zero targets. The International Energy Agency (IEA) highlights the importance of transitioning to energy-efficient and low-carbon buildings to meet climate goals. Crédito Agrícola finances projects for both new construction and renovations of residential and non-residential buildings that align with the EU Taxonomy criteria for climate mitigation. We assign a Light green shade to the green building category, reflecting alignment with EU Taxonomy criteria and energy efficiency benefits. Renovation projects lacking a commitment to exclude fossil fuels in new construction limits their environmental ambition.

- New construction projects are eligible if they achieve an EPC rating of A+ or A, demonstrating high energy efficiency above the national requirements for new buildings. Additionally, the PED must be at least 10% below the threshold set for NZEB requirements under national regulations. Renovations qualify if they achieve at least a 30% reduction in PED or improve the building's EPC rating to a minimum of B. These improvements can be achieved through a series of measures implemented within a maximum of three years. In Portugal, the minimum EPC rating required for buildings is B-, ensuring that renovation projects exceed the baseline national standard.
- Energy efficiency enablers play an important role in improving the environmental performance of buildings. Crédito Agrícola finances projects that involve the manufacture and installation of energy-saving equipment, such as efficient heating and cooling systems, charging stations for electric vehicles, and devices for monitoring and controlling energy use in buildings. To qualify under this category, projects must meet the EU Taxonomy's TSC for climate mitigation, which include demonstrating substantial energy efficiency improvements and aligning with lifecycle emissions thresholds.
- Crédito Agrícola's framework supports substantial energy efficiency improvements, aligning with EU Taxonomy thresholds to prioritize energy efficiency and emissions reduction. Although Portugal has a national NZEB definition under Decree-Law No. 118/2013, which emphasizes high energy performance and renewable energy use, on-site fossil fuel reliance for heating or cooling is not explicitly excluded in the framework. This limitation constrains our assessment of the category.
- Physical climate risks, including extreme weather events, are acknowledged in Crédito Agrícola's framework, with plans to integrate risk assessment tools into credit processes by 2025. Currently, these risks are not fully addressed in lending decisions.

Clean mobility

Assessment

 Dark to Medium green

Description

Enablers manufacturing:

Manufacture, repair, maintenance, retrofitting, repurposing, and upgrading low carbon transport vehicles and personal mobility devices, rail rolling stock and vessels that have zero direct (tailpipe) CO2 emissions.

Manufacture of rechargeable batteries, battery packs and accumulators, battery components (battery active materials, battery cells, casings and electric components) for transport, stationary and off-grid energy storage and other industrial applications.

Recycling of end-of-life batteries.

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant Technical Screening Criteria (TSC) and Minimum Social Safeguards (MSS), but the assessment of Taxonomy-alignment is not carried out for the Do No Significant Harm (DNSH) requirements

Passengers transport:

Purchase, financing, rental, leasing and operation of:

- Railway rolling stock.
- Urban and suburban transport vehicles.
- Road passenger transport etc.

Note: all of the abovementioned means of transportation to have zero direct (tailpipe) CO2 emissions.

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant TSC and MSS, but the assessment of Taxonomy-alignment is not carried out for the DNSH requirements.

Freight transport:

Purchase, financing, leasing, rental and operation of road or freight transport on mainline rail networks as well as short line freight railroads.

Note: Excluding financing of projects dedicated to the transportation or storage of fossil fuels.

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant TSC and MSS, but the assessment of Taxonomy-alignment is not carried out for the DNSH requirements.

Personal mobility:

Purchase, financing, renting, leasing and operation of personal mobility or transport devices with propulsion from zero-emissions motor and/or physical activity of the user.

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant TSC and MSS, but the assessment of Taxonomy-alignment is not carried out for DNSH requirements.

Infrastructure for mobility:

Construction, modernization, maintenance, and operation of infrastructure for:

- o Any relevant supporting infrastructure for personal mobility (such as, pedestrian & bicycle infrastructure);
- o Public, passenger and freight transport (such as, railways, subways, rail service facilities, infrastructure dedicated to transshipment, etc)

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant TSC and MSS, but the assessment of Taxonomy-alignment is not carried out for DNSH requirements.

Analytical considerations

- Electrification and zero-emission transport systems are critical to achieving a low-carbon and climate-resilient future. Crédito Agrícola finances projects across the clean mobility value chain, aligning with the EU Taxonomy's TSC for climate mitigation. We assign a Medium to Dark green shade to this category, reflecting its alignment with climate goals through zero-emission transport financing. Given the bank's predominantly retail portfolio, we expect most financing to focus on personal zero-emission vehicles, which we assess as Dark green. However, areas for improvement remain in lifecycle emissions management and the financing of bi-mode rolling stock, which relies on conventional engines on non-electrified tracks, and which we assess as Light green.
- Crédito Agrícola aims to finance the manufacture, repair, and recycling of low-carbon transport vehicles, including zero-emission rail, urban transport, and personal mobility devices. Eligible projects also include the production and recycling of rechargeable batteries and their components, provided they result in substantial GHG emission reductions. However, lifecycle emissions associated with manufacturing, including material sourcing and processing, are not specifically addressed under the framework, which limits our assessment.
- Crédito Agrícola also finances personal mobility devices powered by zero-emission motors, such as electric scooters or bicycles, as well as human-powered devices like bicycles. These options promote sustainable, low-carbon transport and align with the EU Taxonomy's goals for reducing emissions in the transport sector, which we view as Dark green.
- Crédito Agrícola's clean mobility projects include financing zero-emission vehicles, such as electric buses, rail rolling stock, and personal mobility devices, while excluding fossil-fuel-powered vehicles to meet EU Taxonomy criteria. For bi-mode rolling stock, only vehicles with zero tailpipe CO₂ emissions on electrified tracks are eligible. However, we consider bi-mode rolling stock Light green due to its reliance on conventional engines on non-electrified tracks, which limits full decarbonization. Freight transport financing excludes projects for fossil fuel transportation or storage, focusing instead on low-carbon freight solutions. The framework also does not address lifecycle emissions from rolling stock manufacturing, including material sourcing and processing, which remains a limitation.
- Crédito Agrícola finances sustainable mobility infrastructure, including pedestrian and bicycle pathways, railways, subways, rail service facilities, and transshipment centers for passenger and freight transport. These projects align with the EU Taxonomy's substantial contribution criteria for climate change mitigation by supporting low-carbon and efficient transport systems. However, the framework does not fully address emissions from construction materials or the environmental impact of large-scale infrastructure, which may limit the overall sustainability of these projects.
- While Crédito Agrícola's clean mobility category supports climate mitigation, gaps remain in addressing lifecycle emissions, such as those from battery manufacturing and vehicle production. Additionally, reliance on bi-mode vehicles highlights challenges in full electrification, which limits the category's overall environmental impact.

Energy Efficiency

Assessment

 Light green

Description

Enablers manufacturing and services:

- Manufacture of technologies aimed at substantial GHG emissions reduction;
- Data-driven solutions for GHG emissions reductions (development or use of ICT solutions to collect, transmit, store, model or use data to enable GHG emission reductions); and/or
- Research, development and innovation (solutions, processes, technologies, business models and other products dedicated to the reduction, avoidance, or removal of GHG emissions).

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant Technical Screening Criteria (TSC) and Minimum Social Safeguards (MSS), but the assessment of Taxonomy-alignment is not carried out for the Do No Significant Harm (DNSH) requirements.

Analytical considerations

- We acknowledge that energy efficiency is key to reaching the goal of limiting warming to well below 2°C. According to the IPCC, the breakdown of average mitigation investment flows and investment needs until 2030 shows that energy efficiency is one area that requires the most significant investments. However, our assessment is limited by the lack of clarity regarding the specific types of eligible projects and the absence of defined emission reduction thresholds.
- We assign a Light green shade to this category, reflecting that the issuer aims to finance the manufacturing of technologies that aim for, and demonstrate, substantial lifecycle GHG emissions savings compared to the best performing alternative available in the market. There is some uncertainty as to what types of production could be eligible. However, the issuer confirmed that it will not provide loans for activities related to efficiency improvements to fossil-fuel powered assets.
- Energy efficient projects in fixed assets present some physical climate risks. Crédito Agrícola aims to integrate its current climate risk assessment into its credit assessment by mid-2025.
- There is the potential for adverse negative climate and environmental risks, namely in the production of the equipment and in the end-of-life stage. We note positively that the issuer requires the calculation of that life-cycle emissions savings using the Commission Recommendation 2013/179/EU (100), or ISO 14067:2018(101) or ISO 14064-1:2018(102), and the verification of these by an independent third party. However, there are no specific limits on production emissions.

Forest

Assessment

 Medium green

Description

Afforestation, rehabilitation, and restoration of forests as well as forest management:

- Establishment of forest through planting, deliberate seeding or natural regeneration on land that, until then, was under a different land use or not used;
- Rehabilitation and restoration of forests as defined by national law;
- Forest management as defined by national law (certification either by FSC – Forest Stewardship Council or by PEFC Portugal - Programme for the Endorsement of Forest Certification); and/or

- o Forest management activities with the objective of preserving one or more habitats or species.

Note: EU Taxonomy-aligned on a best-effort basis: Compliant with the relevant Technical Screening Criteria (TSC) and Minimum Social Safeguards (MSS), but the assessment of Taxonomy-alignment is not carried out for the Do No Significant Harm (DNSH) requirements.

Analytical considerations

- Forests can contribute to carbon sequestration and support biodiversity habitats. They also can provide ecosystem services, such as water regulation and soil stabilization, which improve climate resilience. Implementing sustainable forestry management practices, avoiding harmful land-use changes, and managing physical climate risks, including wildfires and pests, are all key to achieving these benefits.
- The financing can apply to forests that are harvested. Timber and bioproducts can provide alternatives with lower value-chain emissions than fossil-fuel-intensive materials. Sustainable input sourcing can help avoid upstream risks such as land-use change or ecosystem degradation from poor cultivation practices, while the management of energy, water, pollution, and waste in production strengthens green benefits.
- Crédito Agrícola will consider whether a forest's carbon sink is being maintained or strengthened over the long term, or the project will need to demonstrate that the climate benefit analysis proves that the net long-term balance of GHG emissions is lower than the business-as-usual practices to gain funding. The bank will also require eligible projects to be certified by the Forest Stewardship Council or by the Portuguese Forest Certification System for its financing.
- Portugal is vulnerable to climate change due to its geography and increasing risks of droughts, heatwaves, and wildfires. Crédito Agrícola acknowledges that wildfires have had a significant material impact in the past given that considerable productive forest areas have been destroyed. The issuer requires its borrowers to provide a climate risk assessment. This is not yet integrated into its credit risk assessment, but should be by mid-2025.
- Portuguese legislation requires an environmental impact assessment. Crédito Agrícola will require its borrowers to submit land use change and biodiversity considerations but does not conduct further due diligences or verification based on its borrowers' biodiversity and land use plans, which we see as a weakness. Moreover, the bank does not establish specific thresholds, for example to increase tree species' diversity or biodiversity over time. Therefore, we assign a Light green shade to this category.

Productive land use

Assessment

 **Light green**

Description

Climate-smart agriculture:

- o Rehabilitation of degraded lands with native and/or naturalized species;
- o Reduction in synthetic fertilizer use by at least 20% on project implementation to reduce downstream eutrophication, and to promote use of biofertilizer and other organic solutions;
- o Reduction in pesticide use by at least 20% on project implementation and promotion of biosolutions;
- o Switching from monocropping to diversified cropping systems, including intercropping and use of cover crops to improve resilience and soil quality;
- o Adoption of sustainable agricultural practices/varieties/technology and/or infrastructure that increases crop yields/quality on existing land without increasing the environmental footprint;
- o Design, implementation, use, or improvement of traceability mechanisms, data, and technologies used to prevent deforestation and monitor biodiversity benefits at the corporate level or along the supply chain; and/or

- o Adoption of efficient irrigation solutions.

Regenerative agriculture:

Adoption of farming and grazing practices that, among other benefits:

- o Rebuild soil organic matter;
- o Restore degraded soil biodiversity;
- o Enhance and maintain ecosystem function;
- o Preserve native seed;

Sustainable fibre production; and/or

- o Other activities that focus on recuperation of the ecosystem through improved land management and that operate throughout the supply chain.













Adoption of innovation and technologies:

- o Adoption of innovation and technologies that improve land-use and agricultural practices, such as geospatial data tools and tools to detect soil degradation.

Analytical considerations

- Crop-based agriculture can drive climate emissions and harm biodiversity and ecosystems. Risks include land-use changes, fertilizer and pesticide overuse, water pollution, soil degradation, and use of fossil fuel-powered equipment. Crops are highly exposed to physical climate risks, such as chronic changes in rainfall and temperatures. A variety of interventions are needed for a green transition for this sector.
- We consider this project category Light green. Climate-smart and regenerative agriculture practices are important for a low-carbon climate-resilient future and the issuer has confirmed that will not finance fossil-fuel equipment. We also view positively the inclusion of thresholds for reducing pesticides and synthetic fertilizer use. However, we note the bank's limited visibility on value-chain risks.
- The bank confirmed it will not finance livestock agriculture, but livestock could be covered in the adoption of innovation and technologies, such as geospatial tools. Livestock farming is a large contributor to climate emissions through animal digestion and manure. Land conversion for both animal farming and feed crops can drive emissions and harm biodiversity. There is a need for tools and monitoring, for instance for GHG and ammonia emissions management. We believe that eligible tools should be deployed in a way that ensures green benefits. Yet, there is currently a lack of clarity of what could be considered eligible projects in this sub-category and on its outcomes.
- Agricultural activities are highly exposed to physical climate risk. In addition, Portugal is one of the European countries most vulnerable to climate change. The bank currently requires borrowers to submit their exposures to physical climate risks through its environmental and social questionnaire. It aims to integrate this climate risk analysis into its credit assessment by mid-2025.
- The issuer will apply its questionnaire, which requires borrowers to self-report, including questions on ecosystems as well as water use, pollution prevention and control, and the circular economy. We note limited considerations related to land-use changes and biodiversity risks. The bank does not conduct further due diligences or verification based on its borrowers' responses, which we view as a limitation.

S&P Global Ratings' Shades of Green

Assessments					
 Dark green	 Medium green	 Light green	 Yellow	 Orange	 Red
Description					
Activities that correspond to the long-term vision of an LCCR future.	Activities that represent significant steps toward an LCCR future but will require further improvements to be long-term LCCR solutions.	Activities representing transition steps in the near-term that avoid emissions lock-in but do not represent long-term LCCR solutions.	Activities that do not have a material impact on the transition to an LCCR future, or, Activities that have some potential inconsistency with the transition to an LCCR future, albeit tempered by existing transition measures.	Activities that are not currently consistent with the transition to an LCCR future. These include activities with moderate potential for emissions lock-in and risk of stranded assets.	Activities that are inconsistent with, and likely to impede, the transition required to achieve the long-term LCCR future. These activities have the highest emissions intensity, with the most potential for emissions lock-in and risk of stranded assets.
Example projects					
 Solar power plants	 Energy efficient buildings	 Hybrid road vehicles	 Health care services	 Conventional steel production	 New oil exploration

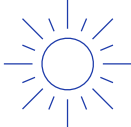



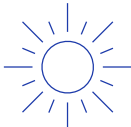










Note: For us to consider use of proceeds aligned with ICMA Principles for a green project, we require project categories directly funded by the financing to be assigned one of the three green Shades.

LCCR--Low-carbon climate resilient. An LCCR future is a future aligned with the Paris Agreement; where the global average temperature increase is held below 2 degrees Celsius (2 C), with efforts to limit it to 1.5 C, above pre-industrial levels, while building resilience to the adverse impact of climate change and achieving sustainable outcomes across both climate and non-climate environmental objectives. Long term and near term--For the purpose of this analysis, we consider the long term to be beyond the middle of the 21st century and the near term to be within the next decade. Emissions lock-in--Where an activity delays or prevents the transition to low-carbon alternatives by perpetuating assets or processes (often fossil fuel use and its corresponding greenhouse gas emissions) that are not aligned with, or cannot adapt to, an LCCR future. Stranded assets--Assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities (as defined by the University of Oxford).

Mapping To The U.N.'s Sustainable Development Goals

Where the financing documentation references the Sustainable Development Goals (SDGs), we consider which SDGs it contributes to. We compare the activities funded by the financing to the International Capital Markets Association (ICMA) SDG mapping and outline the intended linkages within our SPO analysis. Our assessment of SDG mapping does not affect our alignment opinion.

This framework intends to contribute to the following SDGs:

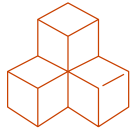
Use of proceeds	SDGs				
Renewable energy					
	7. Affordable and clean energy*	9. Industry, innovation and infrastructure*	12. Responsible consumption and production*	13. Climate action	
Green buildings					
	7. Affordable and clean energy	9. Industry, innovation and infrastructure	11. Sustainable cities and communities*	12. Responsible consumption and production	13. Climate action
Clean mobility					
	9. Industry, innovation and infrastructure	11. Sustainable cities and communities*	12. Responsible consumption and production	13. Climate action	
Energy efficiency					
	9. Industry, innovation and infrastructure*	13. Climate action			

Forest



15. Life on land*

Productive land use



9. Industry, innovation and infrastructure



15. Life on land*

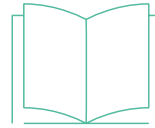
Access to essential services



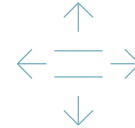
1. No poverty*



3. Good health and well-being*



4. Quality education*

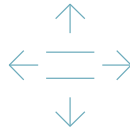


10. Reduced inequalities*

Territorial socio-economic development and protection



8. Decent work and economic growth



10. Reduced inequalities



11. Sustainable cities and communities

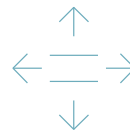
Socioeconomic advancement and empowerment



1. No poverty*



5. Gender equality*



10. Reduced inequalities*

*The eligible project categories link to these SDGs in the ICMA mapping.

Related Research

- [SPO Spotlight: Second Party Opinions](#), March 28, 2024
- [Analytical Approach: Second Party Opinions: Use of Proceeds](#), July 27, 2023
- [FAQ: Applying Our Integrated Analytical Approach for Use-of-Proceeds Second Party Opinions](#), July 27, 2023
- [Analytical Approach: Shades of Green Assessments](#), July 27, 2023
- [S&P Global Ratings ESG Materiality Maps](#), July 20, 2022

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Second Party Opinion Pre-Issuance Review: Crédito Agrícola's Green, Social and Sustainability Bond Framework

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