

# Second-Party Opinion

## Enerjisa Green Finance Framework

### Evaluation Summary

Sustainalytics is of the opinion that the Enerjisa Green Finance Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021 and the Green Loan Principles 2023. This assessment is based on the following:



**USE OF PROCEEDS** The eligible categories for the use of proceeds – Renewable Energy, Energy Efficiency, Clean Transportation and Research and Development – are aligned with those recognized by the Green Bond Principles and the Green Loan Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDGs 7, 9 and 11.



**PROJECT EVALUATION AND SELECTION** Enerjisa has established a Green Finance Committee, which will be responsible for evaluating and selecting projects in accordance with the eligibility criteria under the Framework. Enerjisa has in place internal environmental and social risk management processes that are applicable to all allocation decisions made under the Framework. Sustainalytics considers the project selection process to be in line with market practice.



**MANAGEMENT OF PROCEEDS** Enerjisa's Finance, Treasury and Investment Planning departments will be responsible for the management of proceeds through an internal system. Enerjisa has defined a one-year look-back period for its refinancing activities. It intends to allocate all the proceeds within 24 months of issuance. Pending allocation, proceeds will be temporarily held or invested through cash pooling that is managed by Enerjisa's Treasury department in line with its internal liquidity policies. Debt issued under the Framework may include multitranches loan facilities. The issuer intends to label only those tranches of such facilities where proceeds will be allocated to the activities as per the eligibility criteria in the Framework. This is in line with market practice.



**REPORTING** Enerjisa intends to report on the allocation of proceeds and corresponding impact on its website on an annual basis until full allocation. Allocation reporting will include the percentage of proceeds allocated to each project category, a breakdown of the allocated amount to each project category, the share of financing versus refinancing and any important developments during the allocation reporting period. Sustainalytics views Enerjisa's allocation and impact reporting as aligned with market practice.

## Second-Party Opinion

Reviewed by:

MORNINGSTAR

SUSTAINALYTICS



**Evaluation date** July 07, 2023<sup>1</sup>

**Issuer Location** Istanbul, Turkey

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<sup>1</sup> This document is an update to the Second-Party Opinion originally provided in November 2021.

## Introduction

Enerjisa Enerji A.Ş. (“Enerjisa” or the “Company”) is a power distribution and retail sales company that is headquartered in Istanbul, Turkey. As of 31 December 2021, the Company and its subsidiaries has 11,685 employees and reports TRY 84.4 billion in revenue. The Company serves 11.7 million distribution network connections and 10.3 million customers as of 31 December 2022, accounting for approximately 22% of the Turkish retail electricity market.

Enerjisa engaged Sustainalytics to review the Enerjisa Green Finance Framework dated July 2023 (the “Framework”) and provide a Second-Party Opinion on the Framework’s environmental and social credentials and its alignment with the Green Bond Principles 2021 (GBP)<sup>2</sup> and the Green Loan Principles 2023 (GLP).<sup>3</sup> Enerjisa and its designated subsidiaries or joint ventures<sup>4</sup> intends to issue bonds and loans, multi-tranche-loans and use the proceeds to finance and refinance, in whole or in part, existing or future projects intended to improve energy efficiency and reduce GHG emissions in the Turkey.

The Framework has been published in a separate document.<sup>5</sup> The Framework builds on a previous framework and Second-Party Opinion provided by Sustainalytics dated November 2021. The Framework defines eligibility criteria in four areas:

1. Renewable Energy
2. Energy Efficiency
3. Clean Transportation
4. Research and Development

### Scope of work and limitations of Sustainalytics’ Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent<sup>6</sup> opinion on the alignment of the reviewed Framework with current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework’s alignment with the Green Bond Principles 2023, as administered by ICMA, and the Green Loan Principles 2021, as administered by LMA, APLMA and LSTA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer’s sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.13, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of Enerjisa’s management team to understand the sustainability impact of its business processes and planned use of proceeds, as well as the management of proceeds and reporting aspects of the Framework. Enerjisa representatives have confirmed that: (1) they understand it is the sole responsibility of Enerjisa to ensure that the information provided is complete, accurate and up to date; (2) they have provided Sustainalytics with all relevant information; and (3) any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the Framework and should be read in conjunction with that Framework.

<sup>2</sup> The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>.

<sup>3</sup> The Green Loan Principles are administered by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications and Trading Association and are available at <https://www.lsta.org/content/green-loan-principles/>.

<sup>4</sup> Enerjisa has confirmed that it has operational control over all the subsidiaries and joint ventures and will ensure that these entities’ issuances align with all four components defined in the Framework, along with a similar level of environmental and risk assessment that addresses all the risks identified in Section 2 of this document.

<sup>5</sup> The Enerjisa Green Finance Framework is available at: <https://www.enerjisainvestorrelations.com/Media/Default/pdf/Enerjisa-Green-Finance-Framework.pdf>.

<sup>6</sup> When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Enerjisa.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond and loan proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner. Enerjisa is encouraged to update the Framework after 24 (twenty-four) months from the evaluation date, if necessary, and seek an update to the Second-Party Opinion to ensure ongoing alignment of the Framework with market standards and expectations.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realized allocation of the bond and loan proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Enerjisa has made available to Sustainalytics for the purpose of this Second-Party Opinion.

## **Sustainalytics' Opinion**

### **Section 1: Sustainalytics' Opinion on the Enerjisa Green Finance Framework**

Sustainalytics is of the opinion that the Enerjisa Green Finance Framework is credible and impactful and aligns with the four core components of the GBP and GLP. Sustainalytics highlights the following elements of the Framework:

- Use of Proceeds:
  - The eligible categories – Renewable Energy, Energy Efficiency, Clean Transportation and Research and Development – are aligned with those recognized by the GBP and GLP.
  - Enerjisa has established a one-year look-back period for its refinancing activities, which Sustainalytics considers to be aligned with market practice.
  - Under the Renewable Energy category, Enerjisa may finance or refinance the following:
    - Transmission and distribution projects that integrate renewable energy generated from solar photovoltaic (PV) power, wind, run-of-river hydropower and biomass into the power grid. Sustainalytics notes that the Framework allows for investments in grid integration projects where the power grid's energy mix has less than 90% renewable energy. However, Sustainalytics recognizes that the Framework uses a pro-rated approach to only finance expenditures that are proportional to the existing share of renewable energy in the grid and limits investments to projects where the share of renewable energy in the grid is expected to increase over time.
    - Renewable energy generation from solar PV.
    - Sustainalytics considers expenditures under this category to be aligned with market practice. Sustainalytics also notes that the life cycle emissions intensity of electricity production from bioenergy can vary widely depending on various underlying factors, such as feedstock production (including direct and indirect land-use change), feedstock processing, biofuel and bioenergy production, biofuel storage and blending, transportation. Sustainalytics views it to be an expectation in the green bond market that for financing of biomass power generation, there should be some level of assurance regarding the life cycle emissions of the plants as well as the sustainable sourcing of the feedstock, and notes that Enerjisa will not finance generation facilities.
  - Under the Energy Efficiency category, Enerjisa may finance or refinance the following:
    - Investments in energy distribution network components or upgrades that reduce grid losses or increase grid energy efficiency. This may include upgrades of distribution lines, investments in transformers with lower technical losses, replacements of equipment that standardize voltage, and smart grid components, such as supervisory

- control and data acquisition (SCADA) systems and automatic meter reading systems (AMRS).
  - Investment in acquisition and installation of energy efficient HVAC and LED lighting.
  - Sustainalytics notes that the Framework excludes financing of fossil fuel-powered equipment and considers expenditures under this category to be in line with market practice.
- Under the Clean Transportation category, the Company may finance or refinance: i) installations of electric vehicle (EV) charging stations and related infrastructure; ii) investments to integrate e-charging stations into the grid, including investments in transformer and connection points, investments to increase the power and capacity of the transformers and investments in special transformers for specific areas; and iii) purchase or lease of EVs for Enerjisa's fleet. Enerjisa has communicated to Sustainalytics that both financial and operational leases for EVs will be considered under the Framework and confirmed that in case of operational lease, the proceeds will be reallocated if such lease matures until the maturity of the bonds and loans. Sustainalytics further notes that the Framework excludes investments in parking lots. Sustainalytics considers expenditures under this category to be aligned with market practice.
- Under the Research and Development category, Enerjisa may finance or refinance R&D projects targeting energy-efficiency improvements in the grid. Potential projects may include R&D related to distributed energy, smart grids, microgrids, energy storage and distribution grid system optimization. Sustainalytics notes that the Framework limits investments in this category to less than 1% of the total proceeds allocated. Sustainalytics considers expenditures under this category to be aligned with market practice.
- **Project Evaluation and Selection:**
  - Enerjisa's Green Finance Committee comprises representatives from its Finance, Treasury, Sustainability, Investment Planning and Investor Relations departments and is responsible for the evaluation and selection of projects in accordance with the eligibility criteria defined in the Framework.
  - Enerjisa has adopted internal environmental and social risk management processes that are informed by the Company's Environmental Impact Assessment Procedure and Social Risk Assessment Guide. The risk management processes are applicable to all allocation decisions made under the Framework. For additional details, see Section 2.
  - Based on the establishment of the Green Finance Committee and the presence of environmental and social risk management processes, Sustainalytics considers this process to be in line with market practice.
- **Management of Proceeds:**
  - Enerjisa's Finance, Treasury and Investment Planning departments will be responsible for the management of proceeds. The proceeds will be tracked through the Company's internal system using a special label.
  - Enerjisa intends to fully allocate the proceeds within 24 months of issuance. Pending full allocation, proceeds will be temporarily held or invested through cash pooling managed by the Company's Treasury Department in line with its internal liquidity policies. Enerjisa has confirmed that unallocated proceeds will not be invested in emission-intensive or controversial activities.
  - The instruments issued under the Framework may include multi-tranche loan facilities. Enerjisa will only label those tranches of such facilities green whose proceeds will be allocated to the activities as per the eligibility criteria in the Framework, when all tranches are not directed towards eligible projects.
  - Based on the use of a tracking system and the disclosure of the temporary use of the proceeds, Sustainalytics considers this process to be in line with market practice.
- **Reporting:**
  - Enerjisa intends to report on the allocation of proceeds and corresponding impact within one year of the bond or loan issuance and on an annual basis until full allocation. The report will be published on the Company's website and the Public Disclosure Platform (KAP).
  - Allocation reporting will include the percentage of proceeds allocated to each project category, a breakdown of the allocated amount to each project category, the share of financing versus refinancing and any important developments during the allocation reporting period. Furthermore, Enerjisa will carry out annual allocation reporting for RCFs until the loan maturity or full allocation of the loan.

- In addition, the Company commits to reporting on relevant impact metrics, such as existing and additional renewable energy capacity directly connected to the distribution grid (in MW), estimated emission avoided (in tCO<sub>2</sub>e/year), expected energy savings (in MWh/year) and the number of EVs acquired or replaced. For a complete list of impact indicators, refer to Appendix 1.
- Based on the commitment to both allocation and impact reporting, Sustainalytics considers this process to be in line with market practice.

### **Alignment with Green Bond Principles 2021 and Green Loan Principles 2021**

Sustainalytics has determined that the Enerjisa Green Finance Framework aligns with the four core components of the GBP and GLP. For detailed information, please refer to Appendix 1: Green Bond/Green Bond Programme External Review Form.

## **Section 2: Sustainability Strategy of Enerjisa**

### **Contribution to Enerjisa's sustainability strategy**

Enerjisa demonstrates a commitment to sustainability by contributing to a low-carbon, cleaner and greener energy sector through its energy-related products and services. In 2021, Enerjisa has conducted a materiality assessment and identified climate change and carbon management, energy efficiency and sustainable products and services as material issues to its businesses. Based on the assessment, Enerjisa has developed its sustainability strategy and action plans focusing on three main areas: i) renewable energy products, ii) energy-efficiency solutions, and iii) e-mobility solutions.<sup>7</sup>

Regarding renewable energy products, Enerjisa offers solar power plant services, including design, delivery, installation, maintenance and repair services to industrial, commercial and public organizations and institutions. By 2021, the capacity of Enerjisa's installed rooftop solar power plants reached 22.6 megawatt-peak (MWp), equivalent to a reduction of 12,200 tonnes CO<sub>2</sub> emissions. The Company aims to increase its installed solar capacity by more than 180 MWp by 2025. As an electricity distribution and retail company, Enerjisa also provides customers with renewable energy certificates (REC) and carbon reduction certificates. In 2021, the Company sold 284 GWh of RECs and carbon reduction certificates, equivalent to 27,000 tCO<sub>2</sub>.<sup>8</sup>

Enerjisa provides energy-efficiency applications for waste heat recovery, heating, ventilation, HVAC, pressurized systems, electric engines and lighting. It helped its customers to convert 19,700 light fixtures to LED by 2021, which led to 3,650 MWh of energy savings and a CO<sub>2</sub> emissions reduction of 1,730 tonnes. To reduce energy loss during electricity transmission and distribution, the Company has invested in new transformers, voltage standardization equipment, SCADA systems and AMRS systems since 2021. Enerjisa also replaced 1,620 transformers with lower technical loss transformers in 2021 and aims to replace 10,000 by 2025. The Company invested TRY 35.3 million (EUR 1.71 million) in SCADA systems and AMRS systems in 2021, which enables the Company to better monitor and manage energy consumption and hence improve the grid energy efficiency.<sup>9</sup>

In 2018 and 2019, Enerjisa expanded its e-mobility business by acquiring Eşarj Elektrikli Araçlar Şarj Sistemleri A.Ş. (Eşarj), a Turkish e-mobility company that owns a network of nearly 500 EV charging points and 170 fast charging plugs across approximately 260 public locations in Turkey. For its own operation, Enerjisa has established a Fleet Transformation Plan, aiming to replace the Company's diesel vehicles in its fleet with hybrid and electric vehicles. In 2021, Enerjisa added 42 electric and hybrid vehicles to its fleet, which accounted for 13% of the Company's total fleet vehicles.<sup>10</sup>

Sustainalytics is of the opinion that the Enerjisa Green Finance Framework is aligned with the Company's overall sustainability strategy and will further the Company's action on its key environmental priorities.

### **Approach to managing environmental and social risks associated with the projects**

Sustainalytics recognizes that the net proceeds from the bonds and loans issued under the Framework will be directed towards eligible projects that are expected to have positive environmental impact. However, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks possibly associated with the eligible projects could

<sup>7</sup> Enerjisa, "Our Energy is for our Future: 2021 Sustainability Report", (2021), at: <https://www.enerjisainvestorrelations.com/medium/ReportAndPresentation/File/927/enerjisasustainabilityreport2021.pdf>

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

include land use and biodiversity issues associated with constructions; waste management risks; and issues related to occupational health and safety, community relations, human rights and business ethics.

Sustainalytics is of the opinion that Enerjisa is able to manage and mitigate potential risks through the implementation of the following:

- Regarding land use and biodiversity risks resulting from the operation of electrical grids around Turkey, Enerjisa prepared the Biodiversity Conservation Action Plan in 2020 for three distribution regions as part of the loan agreement carried out with the European Bank for Reconstruction and Development (EBRD).<sup>11</sup> The action plan includes an ecosystem risk assessment prepared in accordance with the Biodiversity Conservation and Sustainable Management of Living Natural Resources Guide of the EBRD,<sup>12</sup> as well as an Avian Protection Plan.<sup>13</sup> The main objective of the Biodiversity Conservation Action Plan is to ensure compliance with national legislation and international obligations, including the Convention on the Conservation of European Wildlife and Natural Habitats,<sup>14</sup> the Rio Convention on Biological Diversity,<sup>15</sup> the Convention on Wetlands ratified by Turkey in 1994<sup>16</sup> and the EU Habitat and Bird Directives.<sup>17</sup>
- Regarding risks related to waste, Enerjisa has designed a waste management system in compliance with the ISO 14001 standards and improved the system pursuant to applicable legislation and its own sustainable development goals.<sup>18</sup> The Company also established hazardous waste management systems, which include temporary storage facilities that are approved by the Provincial Directorates of Environment and Urbanization of their respective cities.<sup>19</sup> Waste will be separated at storage areas and disposed of with the support of licensed recycling companies. For non-hazardous waste, including grid, domestic and biodegradable waste, Enerjisa has set up a Zero Waste System in compliance with applicable regulation in all locations and facilities.<sup>20</sup>
- Regarding risks related to occupational health and safety, Enerjisa follows minimum safety and health requirements in accordance with the International Labour Organization's and Turkey's labour laws.<sup>21,22</sup> Additionally, Enerjisa is compliant with ISO 45001:2018, which demonstrates the presence of established processes and safety protocols to minimize work-related injury and ill health.<sup>23</sup>
- Regarding community relations, the Company promotes engagement through community initiatives and advocacy. Enerjisa has established a Local Governments Communication Plan, under which the Company holds a series of face-to-face meetings with district governors, majors and local community leaders (Muhtar) in operational regions to understand the expectations of the local governments and communities it serves. The plan also enables Enerjisa to improve its business processes from received feedback and suggestions.<sup>24</sup>
- In addition, Enerjisa has developed a Code of Conduct, which provides guidance on issues such as human rights, business ethics, environment protection, anti-bribery and anti-corruption, and compliance with sector-related and general legal regulations. Furthermore, Enerjisa's Ethics and Investigation Department works in co-ordination with the Compliance Management team to ensure compliance with business ethics and all internal procedures and policies.<sup>25</sup>

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Enerjisa has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

<sup>11</sup> Ibid.

<sup>12</sup> EBRD, "Environmental and Social Policy", at: [https://www.ebrd.com/downloads/about/sustainability/ESP\\_PR06\\_Eng.pdf](https://www.ebrd.com/downloads/about/sustainability/ESP_PR06_Eng.pdf)

<sup>13</sup> Document specific to utilities to reduce issues resulting from avian interactions with electric utility facilities.

<sup>14</sup> Council of Europe, "Convention on the Conservation of European Wildlife and Natural Habitats", at: <https://www.coe.int/en/web/bern-convention>

<sup>15</sup> Convention on biological diversity, "The Rio Conventions", at: <https://www.cbd.int/rio/>

<sup>16</sup> Ramsar, "About the Convention on Wetlands", at: <https://www.ramsar.org/about-the-convention-on-wetlands-0>

<sup>17</sup> European Commission, "The Habitats Directive", at: [https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index\\_en.htm](https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm)

<sup>18</sup> ISO, "Introduction to ISO 14001:2015", at: <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100371.pdf>

<sup>19</sup> Enerjisa, "Our Energy is for our Future: 2021 Sustainability Report", (2021), at:

<https://www.enerjisainvestorrelations.com/medium/ReportAndPresentation/File/927/enerjisasustainabilityreport2021.pdf>

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

<sup>22</sup> ILO, "Occupational Safety and Health Profile - Turkey" (2016), at: [https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---ilo-ankara/documents/publication/wcms\\_498829.pdf](https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---ilo-ankara/documents/publication/wcms_498829.pdf)

<sup>23</sup> ISO, "Occupational health and safety management systems", at: <https://www.iso.org/obp/ui/#iso:std:63787:en>

<sup>24</sup> Enerjisa, "Our Energy is for our Future: 2021 Sustainability Report", (2021), at:

<https://www.enerjisainvestorrelations.com/medium/ReportAndPresentation/File/927/enerjisasustainabilityreport2021.pdf>

<sup>25</sup> Ibid.



## Section 3: Impact of Use of Proceeds

All four use of proceeds categories are aligned with those recognized by the GBP and GLP. Sustainalytics focuses on two below where the impact is specifically relevant in local context.

### Importance of financing renewable energy in Turkey

The power sector is the largest contributor to Turkey's CO<sub>2</sub> emissions, accounting for 30% of the country's energy-related CO<sub>2</sub> emissions in 2020.<sup>26</sup> The energy sector's GHG emissions increased by 163.3% between 1990 and 2020 and are expected to rise further.<sup>27,28</sup> In addition, the energy sector in Turkey is dominated by fossil fuels (coal, oil and natural gas), which accounted for 83% of the country's energy mix in 2020.<sup>29</sup> As part of its ratification of the Paris Agreement in 2021, Turkey has committed to achieving nationwide net zero GHG emissions by 2053.<sup>30</sup> In 2022, Turkey further committed to reducing GHG emissions by 41% below business-as-usual levels by 2030.<sup>31</sup> According to the Climate Action Tracker, Turkey would need to phase out coal-fired power generation by 2030, increase renewable electricity generation to 80% by 2030 and fully decarbonize its electricity generation by 2050 to achieve its climate targets.<sup>32</sup>

Turkey has expanded its wind and solar energy installed capacity from 2,273 MW in 2012 to 18,424 MW in 2021.<sup>33</sup> However, the country aims to continue the expansion of its renewable energy resources with a target to commission an additional 10 GW each of solar and wind capacity by 2027.<sup>34</sup> The Government of Turkey estimates the country's wind energy potential to be 48,000 MW and solar potential to be 1,527 kWh/m<sup>2</sup> annually, signalling significant expansion potential.<sup>35</sup> Additionally, overall Turkish renewable energy generation excluding hydropower is expected to increase from 19.07 GW in 2020 to 49.31 GW by 2030.<sup>36</sup> According to Shura, a Turkish energy resource centre, Turkey needs to invest approximately USD 135 billion between 2022 and 2030 in renewable energy, energy efficiency, electrification and energy grid and storage to achieve its energy transition goal.<sup>37</sup>

Based on the above, Sustainalytics is of the opinion that Enerjisa's investments in renewable energy distribution and generation projects under the Framework will contribute to Turkey's renewable energy transition and support the country to achieve its emission reduction targets.

### Importance of financing energy efficiency in Turkey

In order to reduce the emission-intensive demands of the electricity sector, the Government of Turkey has adopted a National Energy Efficiency Action Plan (NEEAP) 2017-2023, which aims to reduce primary energy consumption in Turkey by 14% by 2023 compared to 2017, among other goals. Under the NEEAP, the government intends to increase energy efficiency and reduce GHG emissions across various sectors, such as buildings and services, energy, transport, agriculture, industry and technology, with an approximate investment of USD 11 billion.<sup>38</sup>

In terms of improving efficiency in the distribution sector, the Turkish government has adopted various initiatives, including an implementation of smart grid systems. The smart grid solutions, such as SCADA systems and smart meters, will be integrated to reduce technical energy losses and electricity theft issues at

<sup>26</sup> Climate Transparency, "Turkey: Climate Transparency Report 2021", at: <https://www.climate-transparency.org/wp-content/uploads/2021/10/CT2021Turkey.pdf>

<sup>27</sup> Turkish Statistical Institute, "Greenhouse gas emissions statistics, 1990-2020", (2022), at: <https://data.tuik.gov.tr/Bulten/Index?p=Greenhouse-GasEmissions-Statistics-1990-2020-45862>

<sup>28</sup> IEA, "Turkey 2021: Energy Policy Review," (2021), at: [https://iea.blob.core.windows.net/assets/cc499a7b-b72a-466c-88de-d792a9daff44/Turkey\\_2021\\_Energy\\_Policy\\_Review.pdf](https://iea.blob.core.windows.net/assets/cc499a7b-b72a-466c-88de-d792a9daff44/Turkey_2021_Energy_Policy_Review.pdf)

<sup>29</sup> Climate Transparency, "Turkey: Climate Transparency Report 2021", at: <https://www.climate-transparency.org/wp-content/uploads/2021/10/CT2021Turkey.pdf>

<sup>30</sup> UNDP, "UNDP supports Turkey in charting a course to net zero by 2053", (2021), at: <https://www.undp.org/turkiye/press-releases/undp-supports-turkey-charting-course-net-zero-2053>

<sup>31</sup> Kucukgocmen, A. (2022), "Turkey Raises Greenhouse Gas Emissions Reduction Target for 2030", Reuters, at: <https://www.reuters.com/business/cop/turkey-boosts-greenhouse-gas-emission-reduction-target-2030-2022-11-15/>

<sup>32</sup> Climate Action Tracker, "Scaling up climate action: Turkey", (2019), at: [https://climateactiontracker.org/documents/672/CAT\\_2019-11-29\\_ScalingUp\\_TURKEY\\_FullReport\\_ENG.pdf](https://climateactiontracker.org/documents/672/CAT_2019-11-29_ScalingUp_TURKEY_FullReport_ENG.pdf)

<sup>33</sup> IRENA, "Renewable Energy Statistics", (2022), at: [https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2022/Jul/IRENA\\_Renewable\\_energy\\_statistics\\_2022.pdf?rev=8e3c22a36f964fa2ad8a50e0b4437870](https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2022/Jul/IRENA_Renewable_energy_statistics_2022.pdf?rev=8e3c22a36f964fa2ad8a50e0b4437870)

<sup>34</sup> IEA, "Turkey 2021: Energy Policy Review," (2021), at: <https://www.iea.org/reports/turkey-2021>

<sup>35</sup> Ibid.

<sup>36</sup> Balkan Green Energy News, "Renewable power capacity in Turkey to more than double by 2030 to 50 GW", (2021), at: <https://balkangreenenergynews.com/renewable-power-capacity-in-turkey-to-more-than-double-by-2030-to-50-gw/>

<sup>37</sup> Shura, "Financing the Energy Transition in Turkey within the Context of the Green New Deal", (2022), at: <https://shura.org.tr/wp-content/uploads/2022/06/SHURA-2022-06-Financing-the-Energy-Transition-in-Turkey-within-the-Context.pdf>

<sup>38</sup> [https://iea.blob.core.windows.net/assets/cc499a7b-b72a-466c-88de-d792a9daff44/Turkey\\_2021\\_Energy\\_Policy\\_Review.pdf](https://iea.blob.core.windows.net/assets/cc499a7b-b72a-466c-88de-d792a9daff44/Turkey_2021_Energy_Policy_Review.pdf)

regional and national levels. It is estimated that the majority of these implementation projects will be completed during the 2021-25 period.<sup>39</sup> In addition, the Turkish government has established a smart grid roadmap in line with its National Energy Policy, under which Turkey aims to: i) set up a smart meter infrastructure facility that is used to measure energy distribution by 2025; ii) reduce technical and non-technical losses, including transmission and generation, by 8%; and iii) establish infrastructure for grid integration for approximately 15 million EVs and necessary charging stations by 2035.<sup>40</sup>

Sustainalytics is of the opinion that Enerjisa's investments in energy efficiency projects under the Framework are expected to contribute towards Turkey's efforts to transition to a low-carbon economy.

### Contribution to SDGs

The Sustainable Development Goals were adopted in September 2015 by the United Nations General Assembly and form part of an agenda for achieving sustainable development by 2030. The instruments issued under the Enerjisa Green Finance Framework are expected to help advance the following SDGs and targets:

| Use of Proceeds Category | SDG                                        | SDG target                                                                                                                                                                                                                                                                                                                                               |
|--------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Renewable Energy         | 7. Affordable and Clean Energy             | 7.1 By 2030, increase substantially the share of renewable energy in the global energy mix                                                                                                                                                                                                                                                               |
| Energy Efficiency        | 7. Affordable and Clean Energy             | 7.3 By 2030, double the global rate of improvement in energy efficiency                                                                                                                                                                                                                                                                                  |
| Clean Transportation     | 11. Sustainable Cities and Communities     | 11.2 By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older person                                                |
| Research and Development | 9. Industry, Innovation and Infrastructure | 9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending |

### Conclusion

Enerjisa has developed the Enerjisa Green Finance Framework, under which it may issue green bonds and loans and use the proceeds to finance or refinance renewable energy, energy efficiency, clean transportation and research and development projects. Sustainalytics considers that the projects funded by the proceeds are expected to support Turkey's transition to a low-carbon economy.

The Enerjisa Green Finance Framework outlines a process by which proceeds will be tracked, allocated and managed, and commitments have been made for reporting on the allocation and impact. Sustainalytics believes that the Enerjisa Green Finance Framework is aligned with the overall sustainability strategy of the Company and that the use of proceeds will contribute to the advancement of the UN Sustainable Development Goals 7, 9, and 11. Additionally, Sustainalytics is of the opinion that Enerjisa has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects.

Based on the above, Sustainalytics is confident that Enerjisa is well positioned to issue green bonds and loans, and that the Enerjisa Green Finance Framework is robust, transparent and in alignment with the four core components of the Green Bond Principles 2021 and Green Loan Principles 2021.

<sup>39</sup> Ministry of Foreign Affairs, "Sector Study on Smart Grids in Turkey - Final Report", (2020), at: <https://www.rvo.nl/sites/default/files/2021/02/Sector%20Study%20on%20Smart%20Grids%20in%20Turkey.pdf>

<sup>40</sup> TA 2023, "Turkey Smart Grid 2023: Vision and Strategy Roadmap Summary Report", at: <https://www.elder.org.tr/Content/yayinlar/TAS%20EN.pdf>



## Appendix

### Appendix 1: Green Bond / Green Bond Programme - External Review Form

#### Section 1. Basic Information

|                                                                     |                                  |
|---------------------------------------------------------------------|----------------------------------|
| Issuer name:                                                        | Enerjisa Enerji A.Ş.             |
| Green Bond ISIN or Issuer Green Bond Framework Name, if applicable: | Enerjisa Green Finance Framework |
| Review provider's name:                                             | Sustainalytics                   |
| Completion date of this form:                                       | July 07, 2023                    |
| Original publication date:                                          | November 12, 2021 <sup>41</sup>  |

#### Section 2. Review overview

##### SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBP:

- |                                                            |                                                                                  |
|------------------------------------------------------------|----------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Use of Proceeds        | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting                                    |

##### ROLE(S) OF REVIEW PROVIDER

- |                                                                                 |                                        |
|---------------------------------------------------------------------------------|----------------------------------------|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 <sup>nd</sup> opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification                                           | <input type="checkbox"/> Rating        |
| <input type="checkbox"/> Other <i>(please specify)</i> :                        |                                        |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

##### EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Evaluation Summary above.

<sup>41</sup> Update to Enerjisa Green Finance Framework Second-Party Opinion published on November 12, 2021

## Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

### 1. USE OF PROCEEDS

Overall comment on section *(if applicable)*:

The eligible categories for the use of proceeds – Renewable Energy, Energy Efficiency, Clean Transportation and Research and Development – are aligned with those recognized by the Green Bond Principles and the Green Loan Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDGs 7, 9 and 11.

#### Use of proceeds categories as per GBP:

- |                                                                                                                                                   |                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Renewable energy                                                                                              | <input checked="" type="checkbox"/> Energy efficiency                                                    |
| <input type="checkbox"/> Pollution prevention and control                                                                                         | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation                                                                        | <input checked="" type="checkbox"/> Clean transportation                                                 |
| <input type="checkbox"/> Sustainable water and wastewater management                                                                              | <input type="checkbox"/> Climate change adaptation                                                       |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes                            | <input type="checkbox"/> Green buildings                                                                 |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBP | <input checked="" type="checkbox"/> Other <i>(please specify)</i> : Research and Development             |

If applicable please specify the environmental taxonomy, if other than GBP:

### 2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section *(if applicable)*:

Enerjisa has established a Green Finance Committee, which will be responsible for evaluating and selecting projects in accordance with the eligibility criteria under the Framework. Enerjisa has in place internal environmental and social risk management processes that are applicable to all allocation decisions made under the Framework. Sustainalytics considers the project selection process to be in line with market practice.

#### Evaluation and selection

- |                                                                                                                    |                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Credentials on the issuer's environmental sustainability objectives            | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories               |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |

- ☒ Summary criteria for project evaluation and selection publicly available ☐ Other *(please specify)*:

#### Information on Responsibilities and Accountability

- ☒ Evaluation / Selection criteria subject to external advice or verification ☐ In-house assessment
- ☐ Other *(please specify)*:

### 3. MANAGEMENT OF PROCEEDS

Overall comment on section *(if applicable)*:

Enerjisa's Finance, Treasury and Investment Planning departments will be responsible for the management of proceeds through an internal system. Enerjisa has defined a one-year look-back period for its refinancing activities. It intends to allocate all the proceeds within 24 months of issuance. Pending allocation, proceeds will be temporarily held or invested through cash pooling that is managed by Enerjisa's Treasury department in line with its internal liquidity policies. This is in line with market practice.

#### Tracking of proceeds:

- ☒ Green Bond proceeds segregated or tracked by the issuer in an appropriate manner
- ☒ Disclosure of intended types of temporary investment instruments for unallocated proceeds
- ☐ Other *(please specify)*:

#### Additional disclosure:

- |                                                                                  |                                                                                         |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <input type="checkbox"/> Allocations to future investments only                  | <input checked="" type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements                  | <input checked="" type="checkbox"/> Allocation to a portfolio of disbursements          |
| <input type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other <i>(please specify)</i> :                                |

### 4. REPORTING

Overall comment on section *(if applicable)*:

Enerjisa intends to report on the allocation of proceeds and corresponding impact on its website on an annual basis until full allocation. Allocation reporting will include the percentage of proceeds allocated to each project category, a breakdown of the allocated amount to each project category, the share of financing versus refinancing and any important developments during the allocation reporting period. Sustainalytics views Enerjisa's allocation and impact reporting as aligned with market practice.

#### Use of proceeds reporting:

- ☐ Project-by-project ☒ On a project portfolio basis

- ☐ Linkage to individual bond(s) ☐ Other (please specify):

**Information reported:**

- ☒ Allocated amounts ☐ Green Bond financed share of total investment
- ☒ Other (please specify): the percentage of proceeds allocated to each project category; the share of financing versus refinancing; important developments during allocation reporting period if any

**Frequency:**

- ☒ Annual ☐ Semi-annual
- ☐ Other (please specify):

**Impact reporting:**

- ☐ Project-by-project ☒ On a project portfolio basis
- ☐ Linkage to individual bond(s) ☐ Other (please specify):

**Information reported (expected or ex-post):**

- ☒ GHG Emissions / Savings ☒ Energy Savings
- ☐ Decrease in water use ☒ Other ESG indicators (please specify):

| Eligibility category | Impact indicators                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Renewable Energy     | <b>Integration of Production from Renewable Sources (Distribution)</b> <ul style="list-style-type: none"> <li>Existing and additional renewable energy capacity directly connected to the distribution grid (MW) and its ratio to the total power consumption in the distribution regions</li> </ul>                                                                               |
|                      | <b>Renewable Generation Projects e.g. Solar Rooftop, SPP (Customer Solutions)</b> <ul style="list-style-type: none"> <li>Installed Capacity (MW) – Client/Scope 3</li> <li>Estimated emissions avoided for projects provided by EMC solutions per year (tCO2e/year) – Client/Scope 3</li> </ul>                                                                                    |
| Energy Efficiency    | <b>Transformer Replacement (Distribution)</b> <ul style="list-style-type: none"> <li>Number of transformers installed (# of Transformers)</li> </ul> <b>Smart Grid Investment (Distribution)</b> <ul style="list-style-type: none"> <li>Investments for smart grid components installed (such as SCADA, automatic meter reading (OSOS) investments) (in Monetary Value)</li> </ul> |

| Eligibility category            | Impact indicators                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                 | <b>Standardizing Voltage Across Distribution (Distribution)</b> <ul style="list-style-type: none"> <li>Investments for standardizing voltage across the distribution network (in Monetary Value) (for instance; the equipment with 6.3 kV voltage is replaced by 36 kV.)</li> </ul>                                                                                                                                                             |
|                                 | <b>Energy Saving Projects, e.g. LED Replacement, HVAC (Customer Solutions)</b> <ul style="list-style-type: none"> <li>Expected energy savings for projects provided by EMC per year (MWh/year) – Client/Scope 3</li> </ul>                                                                                                                                                                                                                      |
| <b>Clean Transportation</b>     | <b>E-Charge Stations (E-şarj)</b> <ul style="list-style-type: none"> <li>Installed capacity for E-charge stations (MW)</li> <li>Number of new E-charge station/charging points (# of Units)</li> </ul> <b>Fleet (Company Owned Vehicles) (Enerjisa and its subsidiaries)</b> <ul style="list-style-type: none"> <li>Number of electric vehicles acquired/replaced (# of Units)</li> <li>Estimated avoided CO2 emissions (tCO2e/year)</li> </ul> |
| <b>Research and Development</b> | <b>R&amp;D Projects (Distribution)</b> <ul style="list-style-type: none"> <li>Number of eligible projects (#of Units)</li> <li>Investments for eligible R&amp;D projects (in Monetary Value)</li> <li>Future qualitative environmental benefits</li> </ul>                                                                                                                                                                                      |

**Frequency**

- ☒ Annual
 ☐ Semi-annual
 ☐ Other (please specify):

**Means of Disclosure**

- ☐ Information published in financial report
 ☐ Information published in sustainability report
- ☐ Information published in ad hoc documents
 ☒ Other (please specify): information published on Enerjisa's website and the Public Disclosure Platform (KAP)
- ☐ Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

**USEFUL LINKS** (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)



---

**SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE**

**Type(s) of Review provided:**

- |                                                                      |                                        |
|----------------------------------------------------------------------|----------------------------------------|
| <input type="checkbox"/> Consultancy (incl. 2 <sup>nd</sup> opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit                        | <input type="checkbox"/> Rating        |
| <input type="checkbox"/> Other ( <i>please specify</i> ):            |                                        |

**Review provider(s):**

**Date of publication:**

**ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP**

- i. Second-Party Opinion: An institution with environmental expertise, that is independent from the issuer may issue a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. Green Bond Scoring/Rating: An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

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