

# Alliander

Green Finance  
Report 2020

**alliander**

15 September 2020

# Introduction

Alliander N.V. has issued four Green Finance Instruments since 2016. These instruments include a €300 million green bond issue in April 2016, a €300 million green bond issue in June 2019 and a €500 million green bond issue in June 2020. In April 2020, a €100 million private placement was issued. All issues were arranged under the Euro Medium-Term Notes Program (EMTN)..

As set out in Alliander's Green Finance Framework, the net proceeds of the Green Finance Instruments have been exclusively used to finance or refinance, in whole or in part, eligible assets ("Eligible Green Assets") in the following categories, together forming the "Eligible Green Asset Portfolio":

- 1) Renewable Energy (integration of renewable electricity in existing electricity grids);
- 2) Energy Efficiency (smart technology including smart meters and communication technology);
- 3) Green Buildings.

The Green Finance Framework sets the basis for the identification, selection, verification and reporting of the Eligible Green Assets as well as the management of the proceeds from Green Finance Instruments.

Within the framework, the categories relating to Eligible Green Assets are aligned with the Sustainable Development Goals of the United Nations (UN SDG), Goals 7, 9, 11 and 13 in particular.

Alliander's Green Finance Framework is verified against the International Capital Market Association's (ICMA) Green Bond Principles (GBPs) and the Green Loan Principles (GLPs) for each of the green bond issues. This information can be found in the corresponding Second Party Opinions (SPO) prepared by ISS-ESG (formerly ISS ~oekom and oekom research), which are available on the corporate website <https://www.alliander.com/en/investors/financing/green-bonds/>. These SPOs also contain an assessment of the asset pool, whether projects are aligned with ISS ESG's issue-specific key performance indicators, as well as to Alliander's sustainability performance according to the ISS-ESG rating.

Deloitte has provided limited assurance on specific elements of the allocation of each Green Finance Instrument's proceeds.

See page 8 for the assurance report.

With this report Alliander fulfills its commitment as stated in its Green Finance Framework to report on the allocation of net proceeds and associated environmental benefits annually until the proceeds of each Green Finance Instruments have been fully allocated,

This report contains information on the use of proceeds, allocation and impact reporting of all Green Finance Instruments issued to date. Also included are case studies on the Fair Meter and on the integration of renewable energy in existing electricity grids. They provide background information on the assets financed by the green bonds issued in 2019 and 2020 respectively.



# Allocation report

**Use of Proceeds Allocation Table**

Eligible Green Asset Portfolio per 30 June 2020				Green Funding			
Green Eligible Category	Net asset value (mEUR)	Weight factor	Weighted amount (mEUR)	Instrument (ISIN)	Issuance Date	Maturity Date	Amount (mEUR)
Renewable Energy (grid)	2.932	19,2%	563	XS1400167133	22-04-2016	22-04-2026	300
Energy Efficiency	582	100%	582	XS2014382845	24-06-2019	24-06-2032	300
Smart Meters	526	100%	526	XS2152901315	08-04-2020	08-04-2035	100
Fibre-optic telecom network	56	100%	56	XS2187525949	10-06-2020	10-06-2030	500
Green Buildings	71	100%	71				
<b>Total Eligible Green Asset Portfolio</b>	<b>1.216</b>			<b>Total Green Funding</b>			<b>1.200</b>

Percentage of Eligible Green Asset Portfolio allocated to Green Finance Instruments net proceeds:	100%
Percentage of Net Proceeds of Green Funding allocated to Eligible Green Loan Portfolio:	100%
Eligible Green Asset Portfolio - Unallocated:	1%
Increase in net asset value of the Energy Efficiency and Green Buildings categories since December 2016	263

## Notes to the Allocation report

Proceeds from all Green Finance Instruments have been fully allocated to the Eligible Green Asset Portfolio and have been fully used for refinancing purposes.

The Green Buildings included have a BREEAM-NL outstanding certification.

The renewable power generation capacity ratio is defined as the renewables installed capacity as a proportion of all sources of electricity capacity in the Dutch transmission grid. In 2019, the renewable power

generation ratio in the Netherlands correspond to 19.2%

(Source:

<https://www.klimaatkoord.nl/actueel/nieuws/2019/12/30/duurzame-energie-groeit-13-procent-in-2019>). Alliander currently takes a conservative approach to defining the electricity grid eligible amount; however, it may, in the future, include a higher percentage of the asset value of the grid if the EU Taxonomy regulation recommends it.



# Impact report

Impact reporting table aligned with the portfolio approach impact reporting described in "Handbook - Harmonized Framework for Impact Reporting (June 2019)" See below<sup>1</sup>.

ICMA / LMA Green Eligible category <sup>2</sup>	Signed Amount EUR million <sup>3</sup>	Share of Total Portfolio Financing <sup>4</sup>	Eligibility for Green Financing Instruments <sup>5</sup>	Capacity of renewable energy production connected to the grid <sup>6</sup>	Renewable energy production feed into grid by total solar, wind capacity <sup>6</sup>	Energy consumption savings <sup>6</sup>	Estimated avoided CO <sub>2</sub> emissions (GHG scope 1+2) <sup>6</sup>	Estimated avoided CO <sub>2</sub> emissions (GHG scope 3) <sup>6</sup>	Contribution to specific UN SDG
Renewable Energy (grid)	563	46%	100%	4,506	5,992,184			2,846,288	UN SDG 7,13
Energy Efficiency (only Smart Technologies)	582	48%	100%			1,076,237		82,345	UN SDG 9,11
Green Buildings	71	6%	100%			18,361 <sup>7</sup>	1,560		UN SDG 11
<b>Total</b>	<b>1,216</b>	<b>100%</b>	<b>100%</b>	4,506	5,992,184	1,094,598	<b>1,560</b>	<b>2,928,633</b>	

<sup>1</sup> <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2019/Handbook-Harmonized-Framework-for-Impact-Reporting-WEB-100619.pdf>

<sup>2</sup> Eligible category

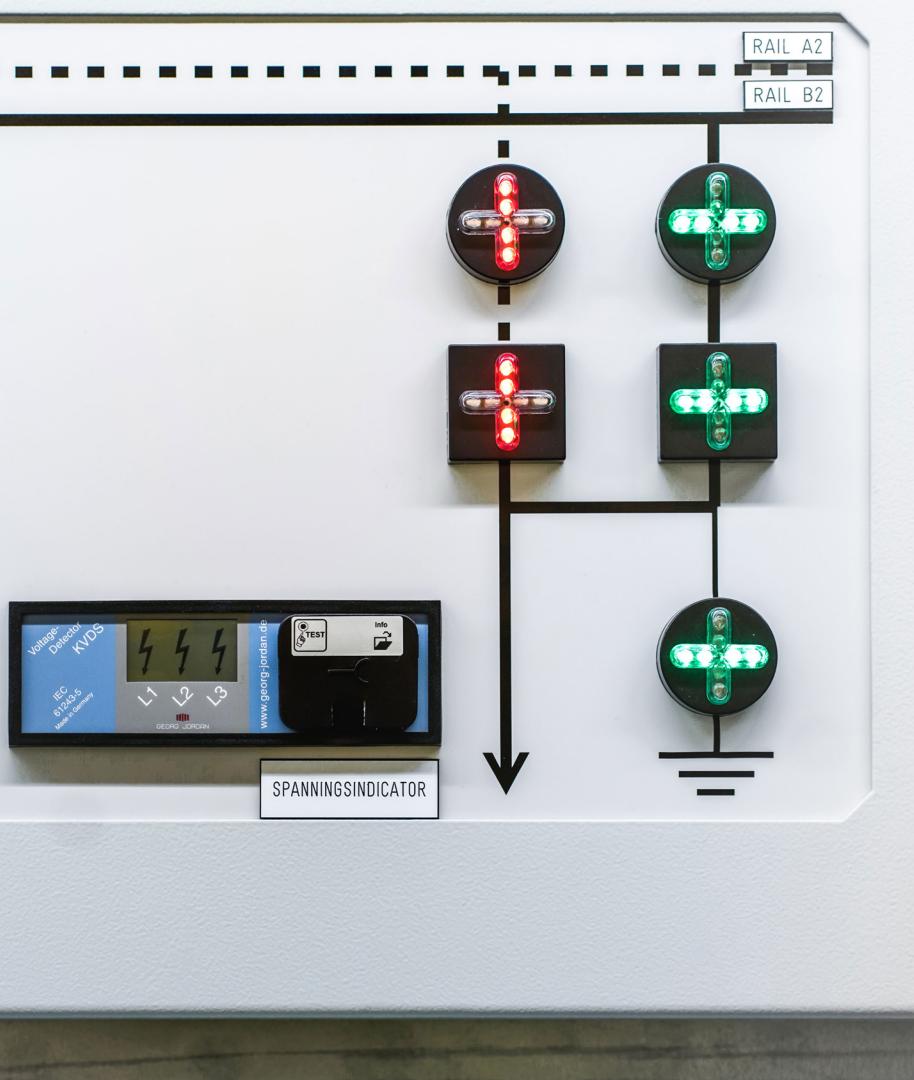
<sup>3</sup> Signed amount represents the amount legally committed by the issuer for the portfolio or portfolio components eligible for Green Finance Instruments

<sup>4</sup> This is the share of the total portfolio per Eligible category

<sup>5</sup> This is the share of the total portfolio costs that is eligible for Green Finance Instruments

<sup>6</sup> Impact report indicators

<sup>7</sup> Average primary energy consumption savings compared to the Dutch average is 840 MJ/M2



## Notes to the Impact report

### Renewable Energy

The avoided CO<sub>2</sub> emissions have been estimated by taking the annual expected electricity production from connected wind and solar capacity and calculating the amount of CO<sub>2</sub> that would have been emitted if the average production mix (including coal and gas) had been applied.

### Energy Efficiency

The avoided CO<sub>2</sub> emissions have been estimated by applying a 1% saving on the annual consumption of gas and electricity households. This represents the effect of improved insight into actual energy consumption savings.

### Green Buildings

Avoided CO<sub>2</sub> emissions are calculated on the basis of 21,858m<sup>2</sup> of office space for the Duiven location, comparing the energy consumption of this location per m<sup>2</sup> with that of the average Dutch office building. For lack of more recent information we have used the Dutch average energy consumption from 2016.

All projects contribute to EU Environmental Objective Climate Change Mitigation.

Avoided CO<sub>2</sub> emissions reflect the scopes of the Green House Gas emission protocols. Green House Gas related emissions of our activities are disclosed in our annual report. Customer related scope 3 emissions, as part of the energy use within the supply chain, are not included in our annual report.

# Reporting changes

Alliander's first Green Bond Report was published in 2017 and related to our inaugural green bond issued in April 2016. This was a one-off report.

This report is our second report on Green Financing and incorporates some important changes compared to the previous report:



1. Portfolio based reporting. We will report on the portfolio of Eligible Assets and the amounts of Green Financing outstanding instead of on an instrument-by-instrument basis. The impact of each instrument can still be derived by using a pro-rata approach.
2. Net asset value reporting. In light of the recommendations of the EU Green Bond Standard and its position towards refinancing long-dated green assets, we have moved from CAPEX reporting to net asset value reporting. This allows us to apply a weighted net asset value approach that better fits the nature of our network activities. While our whole network is used to distribute renewable electricity to our customers, only part of the electricity we distribute is from renewable origin. We therefore apply a weight to the net asset value of our network assets based on the share of renewable generation capacity out of the total electricity generation capacity in the Netherlands.
3. As our reporting on the second green bond issued in June 2019 was due in June 2020, and we were already in position to report on the green bond issued in June 2020, we have combined the two reports into one. This report also covers the €100 million private placement issued in April 2020. All net proceeds of these Green Finance Instruments have been fully allocated.

## Use of proceeds

Renewable Energy: this includes investments in the electricity grid such as cables, medium-voltage stations and substations as well as connections to renewable sources like wind and solar and connections to household and business consumers.

Energy Efficiency: this includes investments in smart meters (including Fair Meters), wireless telecom network and fibre optic telecom network.

Green Buildings: this includes investment in our energy neutral office building in Duiven.

# Case study: Fair Meter

The Fair Meter project was started in 2013 as an initiative of Dutch network companies Liander and Stedin, in collaboration with smart meter suppliers. This involved an open network to advance sustainable practices in the smart meter roll out. The aim of the project was to build a new generation of smart meters in a sustainable, responsible manner: a fair meter. Inspired by the Dutch company Fairphone, we have defined the concept Fair and included it as a requirement in the 2015 tender for the new meters.

By using sustainable practices and including material and social aspects in the production of smart meters for gas and electricity, we developed the Fair Meter to address all major issues that the electronics industry is facing today – energy intensity, labour conditions, use of critical and/ or disputed or toxic materials, material scarcity and e-waste.



As a result, a Green Deal was signed for the development of a Fair Meter, an agreement between the Dutch government, knowledge institutes and DSOs. The Green Deal partners had the objective of developing a Fair Meter, from a concept to a business case that could eventually be realized. The Green Deal was completed in 2016, after which the focus of the project shifted to the development of the Fair Meter as a cooperative effort of Dutch DSOs and the electricity and gas meter industry.

Principles concerning responsible and transparent supply chain practices, energy neutrality, circular economy, as well as co-creation and reciprocity to stakeholder demands led to a new generation of smart meters that are more sustainable. Alongside the production of the meters, the transport and installation also are part of the Fair concept. Contractors had to rethink their logistics and delivery patterns and were asked to include a percentage of vulnerable people in their workforce during the meter roll out.

The positive results of the fair smart tender and subsequent deals were manifold. After piloting and evaluation, the selected smart meter suppliers succeeded in considerable footprint reduction with their “stage-2- meters”. Proof of concepts were realized, theoretically as well as practically. Electricity meters weight decreased from 1.2 kg to 0.7 kg, contained 20% less plastic and 58% less metal. The gas meters contained 20% less plastic. CO<sub>2</sub> related emissions were reduced to 1.14 kg CO<sub>2</sub> per meter; given around one million meters, this translates to 1,140 metric tons CO<sub>2</sub> avoided. For several materials conflict free certificates were acquired. Packing was reduced or avoided if possible. The case shows that goals concerning the transparency of supply chain practices and materials were realistic. Furthermore, “fair” emerged as a USP for supply chain partners, and the case is an example and experience for an impactful approach for participants.

# Case study: Optimal integration of local energy generation into the network

Growing local energy feed in, economic growth and the increase in the number and character of customer connections result in ongoing growth in demand for distribution capacity. With the impending regional energy transition plans, network capacity in our regions needs to increase significantly. As a result, we are faced with a range of dilemmas.

In many situations, the grid is not well structured for large scale feed in of locally generated energy. Due to the ageing population and a shrinking pool of technically skilled employees, we are facing a shortage in operational capacity to implement all of the requested plans and expansions in our grids. Furthermore, regulated planning schemes and related investment plans for infrastructure tend to be subject to relatively long procedures before they can be realized. In fact, the energy transition is hampered by a range of technical, legal, organizational and financial factors. In dealing with these limitations, Alliander is searching for practical approaches that will enable us to serve our customers in the best possible way.

As an alternative to our regular practice, we use smart management, reduced power peaks, and cable pooling to integrate growing local energy supply in our grids. Curtailment techniques for solar parks, for example, may give way to a reduction (-3%) in energy feed-in during peak hours by allowing for about 30% extra solar panels at different customer locations within the area. With this approach, we save on costs as well as planning time and, consequently, optimize renewable energy feed-in from a social cost perspective.

Cable pooling is an acknowledged and legal technique for combining the feed of wind and solar energy into one cable, efficiently making use of the alternated supply by wind turbines and solar energy systems. This pooling is a practice in the Nijmegen-Betuwe area, where solar panels are connected to the existing grid connection of the wind turbines, eliminating the need for an additional connection. Cable pooling enables energy feed into our existing cable network and can be a solution for locations with combined and complementary development of solar and wind parks.

As a result, combined wind and solar parks are able to save on connection costs.

Several impact calculation studies and pilots show the positive net impact of alternative solutions for the management of our electricity infrastructure. The cost savings from having one instead of two connections outweigh the drawback of not being able to facilitate the entire peak load and/or the chance that there may be a slight increase in the number of power interruptions. The impact is greater than it would be if peak capacity were to be facilitated by upgrading the energy network, and the money saved can be put to better use elsewhere, by investing in the energy transition. Current legislation and regulations do not cover all forms of flexibility. Alliander and the competent authorities are in dialogue on the conditions and legal options for speeding up connections for locally generated renewable energy, thus serving the energy transition.



# Assurance report of the independent auditor

To: the Management Board of Alliander N.V.

## Our conclusion

We have examined the Net Asset Value as per June 30, 2020 as included in the Allocation Report section (page 3) of the Green Finance Report 2020 of Alliander N.V. ('the company') at Arnhem.

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Net Asset Value as per June 30, 2020 as included in the Allocation Report section (page 3) of the Green Finance Report 2020 ('the Report') of Alliander N.V. is not prepared in all material respects, in accordance with the applicable criteria.

## Basis for our conclusion

We have performed our examination in accordance with Dutch law, including Dutch Standard 3000A 'Assurance-opdrachten anders dan opdrachten tot controle of beoordeling van historische financiële informatie (attest-opdrachten) (assurance engagements other than audits or reviews of historical financial information (attestation engagements)'). This engagement is aimed to obtain limited assurance. Our responsibilities in this regard are further described in the 'Our responsibilities for the examination of the Net Asset Value as per June 30, 2020 as included in the Allocation Report section (page 3) of the Green Finance Report 2020' section of our report.

We are independent of Alliander N.V. in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence). Furthermore we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

## Applicable criteria

For this engagement, the following criteria apply:

- Alliander Green Finance Framework May 2020

## Responsibilities of the management board

The management board of the company is responsible for the preparation of the Net Asset Value as per June 30, 2020 as included in the Allocation Report section (page 3) of the Green Finance Report 2020 in accordance with the applicable criteria.

The management board is also responsible for such internal control as it determines is necessary to enable the preparation, measurement or evaluation of the Net Asset Value as per June 30, 2020 as included in the Allocation Report section (page 3) of the Green Finance Report 2020 that is free from material misstatement, whether due to fraud or errors.

The supervisory board is responsible for overseeing the company's reporting process.

## Our responsibilities for the examination of the Net Asset Value as per June 30, 2020 as included in the Allocation Report section (page 3) of the Green Finance Report 2020

Our responsibility is to plan and perform the assurance assignment in a manner that allows us to obtain sufficient and appropriate evidence for our conclusion.

The procedures performed in this context differ in nature and timing and are less extent as compared to reasonable assurance engagements. The level of assurance obtained in a limited assurance engagement is therefore substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

We apply the 'Nadere voorschriften kwaliteitssystemen' (NVKS, Regulations for quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Misstatements can arise from fraud or errors and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users taken on the basis of the Net Asset Value as per June 30, 2020 as included in the Allocation Report section (page 3) of the Green Finance Report 2020. The materiality affects the nature, timing and extent of our procedures and the evaluation of the effect of identified misstatements on our conclusion.

Our examination included amongst others:

- identifying areas of the Net Asset Value as per June 30, 2020 as included in the Allocation Report section (page 3) of the Green Finance Report 2020 where a material misstatement, whether due to errors of fraud, are most likely to occur, designing and performing procedures responsive to these areas, and obtaining information that is sufficient and appropriate to provide a basis for our conclusion;
- considering the internal control relevant to the examination in order to select procedures that are appropriate in the circumstances, but not for the purpose of expressing a conclusion on the effectiveness of the company's internal control;
- making inquiries of management and others within the entity;
- determining the plausibility of the information included in the Net Asset Value as per June 30, 2020 as included in the Allocation Report section (page 3) of the Green Finance Report 2020;
- evaluating internal and external documentation, in addition to interviews, to determine whether the information in the Report is reliable.

Amsterdam, September 15, 2020

Deloitte Accountants B.V.

Signed on the original: B. Dielissen RA



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#### **Explanatory note**

“We”, “Alliander”, “the company” and similar expressions used in this report mean Alliander N.V. and its subsidiaries.