



CARBON FOOTPRINT 2020

June 2021



About the Carbon Footprint Report

This Report presents Vieira de Almeida's ("VdA") carbon footprint results for 2020, including associated resource consumption levels.

The Carbon Footprint Report acts as the main annual assessment tool of VdA's Green Project and also aims to report these results to the Legal Sustainability Alliance (LSA), which VdA is a member of.

The values here presented were calculated based on the methodology of the Greenhouse Gas Protocol, applied to the legal sector, and using conversion factors adapted to the Portuguese reality.

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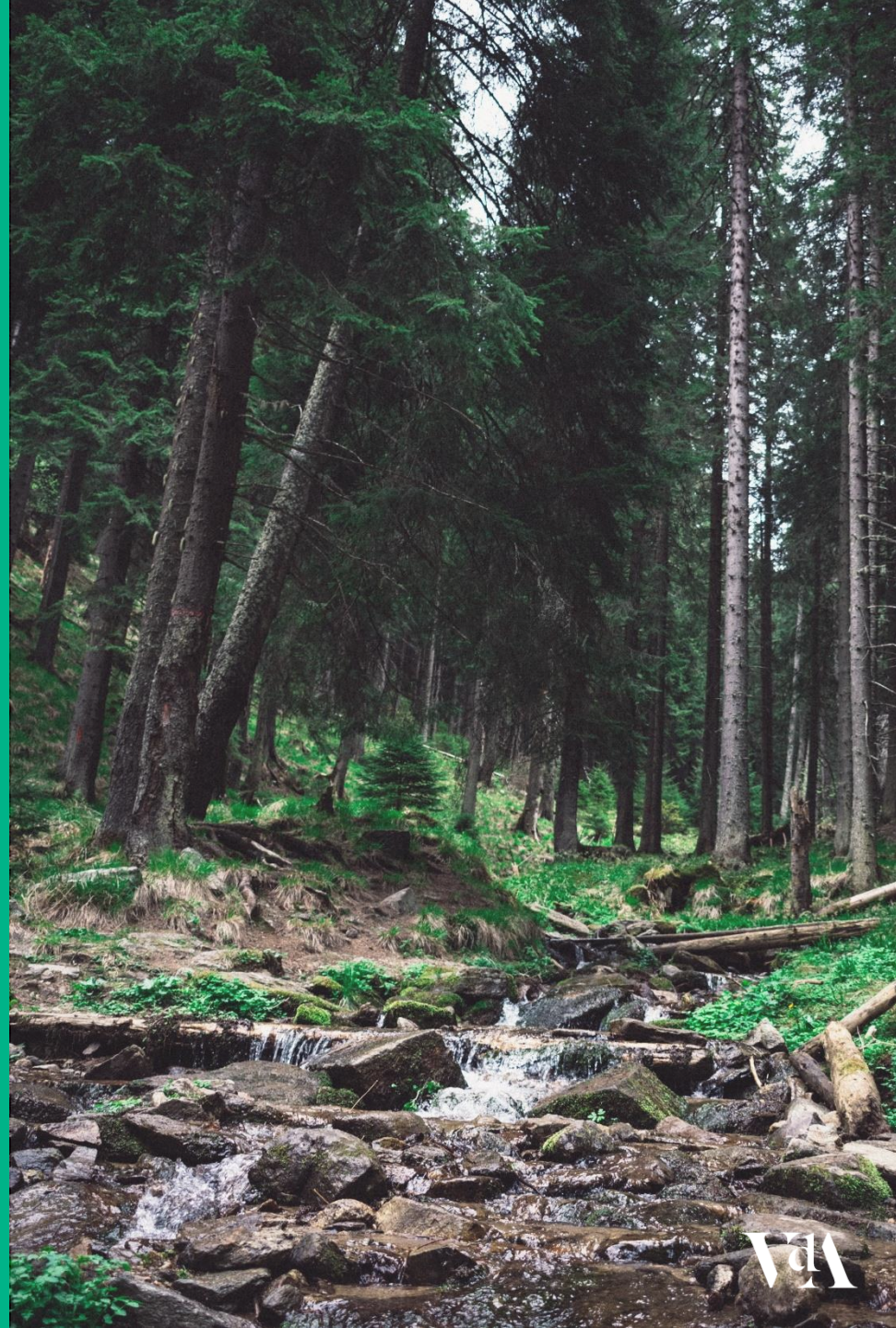
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EXECUTIVE SUMMARY



VdA's 2020 Carbon Footprint and Environmental Indicators



Environmental Targets 2018-2022

- 5% resource consumption
- 5% carbon emissions per employee
- + 5% waste recycling rate



100% renewable electricity since the 2nd semester of 2020

430 tCO₂e avoided per year, equal to
6 750 Lisbon-Oporto car trips



3 158 kWh of energy consumed per employee

-7% 2018-2020



3 754 km travelled per employee on work trips

-75% 2018-2020

All environmental indicators evolved favourably in 2020, surpassing the improvement targets set for the period 2018-2022.



71% of waste recycled

+18% 2018-2020



20 kg of paper consumed per employee

-62% 2018-2020



8 m³ of water consumed per employee

-28% 2018-2020

Since 1 July 2020, 100% of electricity consumed by VdA is from certified renewable sources and its production is carbon neutral.



313 t CO₂e of carbon footprint (Scope 1, 2 & 3 emissions)

-836 tCO₂e 2018-2020



0,73 t CO₂e of carbon emissions per employee

-74% 2018-2020



30 000 trees per year to offset VdA's carbon footprint

The use of renewable electricity and the adoption of more sustainable mobility patterns reduced VdA's carbon footprint by 70% in relation to 2018.

Notes: (1) Energy includes electricity and fuels (natural gas and diesel) consumed at VdA's premises. (2) Mobility includes use of VdA's motorbike fleet and travel by air, train, taxi and Uber, rental car and personal vehicle for business purposes. (3) Carbon footprint includes Scope 1, 2 & 3 emissions and considers electricity emissions calculated according to the specific carbon content of the electricity purchased (Market-based method). (4) Emissions avoided with the purchase of renewable electricity take into account the average value of the emissions associated to the Firm's electricity consumption between 2011 and 2019, calculated based on the average carbon content of grid electricity in Portugal.

ABOUT VdA'S GREEN PROJECT AND CARBON FOOTPRINT



About VdA and the Green Project

VdA is a leading Portuguese law firm with a team of 440 professionals, including more than 300 lawyers working in 21 practice areas.

The Firm has two offices in Portugal (in Lisbon and Oporto) and also acts internationally, in 12 jurisdictions, through VdA Legal Partners, a network of independent lawyers and law firms associated with VdA for the provision of integrated legal services in both Portuguese and French-speaking Africa, as well as East Timor.

VdA's Corporate Social Responsibility Programme is built on six pillars: pro bono legal assistance, citizenship education, third sector capacity building, corporate volunteering, internal campaigns and environmental sustainability.

The environmental dimension of VdA's activity is promoted by the Vasco Vieira de Almeida Foundation through the Green Project, a sustainable development and eco-efficiency programme that aims to minimise the Firm's negative environmental impact.

VdA is a member of the Legal Sustainability Alliance (LSA), an international organisation of law firms committed to promoting sustainability. It is also a member of BCSD Portugal, a business association that is part of the global network of the World Business Council for Sustainable Development (WBCSD), and a signatory of The Porto Protocol, a business forum devoted to the sharing of experiences and debate on climate change action.

VdA is also a member of the United Nations Global Compact and is among the first 600 companies in the world to have joined the SDG Ambition Programme, through which it has committed to actively contribute to achieving the Sustainable Development Goals (SDGs).

VdA's Carbon Footprint

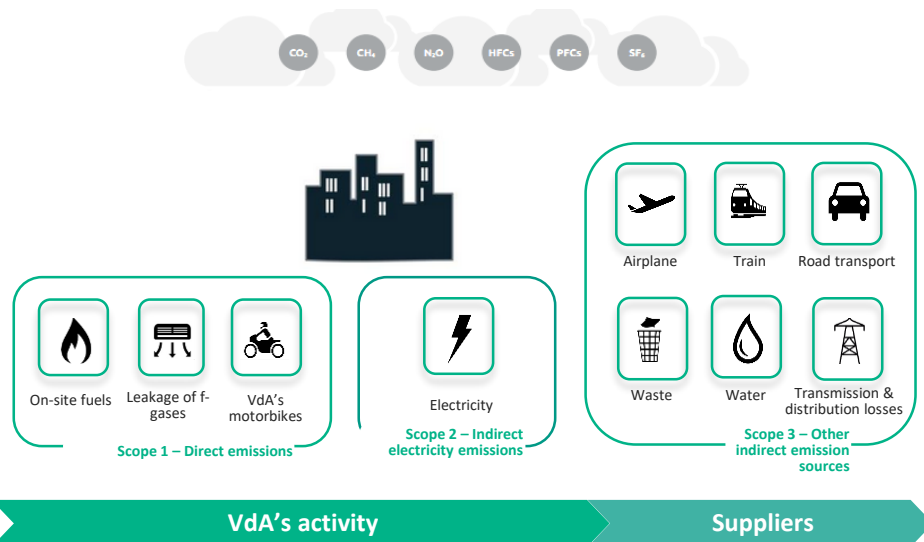


Fig. 1 – VdA's Carbon Footprint: activities and emission sources

VdA's activity is responsible for the direct and indirect emission of several greenhouse gases (GHG), the most significant of which is carbon dioxide (CO₂).

These emissions result mainly from the Firm's energy consumption at its offices and business travel. Although less relevant, other sources emit gases with a greater greenhouse effect than CO₂, such as methane (CH₄) and hydrofluorocarbons (HFCs). The carbon footprint is the combined measure of all these emissions, determined in accordance with internationally recognised calculation methodologies.

GHG emissions produced by human activity are currently acknowledged as the main cause of climate change. Their monitoring, measurement and reduction, across all economic sectors, is therefore essential to fight this problem.

VdA has measured its carbon footprint since 2011 in accordance with the Greenhouse Gas Protocol methodology, applied to the legal sector, in line with LSA guidelines.

VdA CARBON FOOTPRINT 2020



Resource Consumption

Energy

In 2020, energy consumption decreased by 1%, in **absolute** terms, in comparison with the previous year. Despite the adoption of remote working from March due to the Covid-19 pandemic, there was no significant change in the energy consumed at VdA's offices. The need to maintain the air conditioning and ventilation systems in full operation, even with a reduced occupancy rate, limited energy savings given that these systems account for the majority of total consumption.

The consumption indicator **per employee** registered a slight increase (+2%) explained by the reduction in the total number of employees (-3%).

The form of energy most used at VdA's offices is electricity, which represented 99% of total consumption in 2020. The remaining consumption is divided between natural gas – used in food preparation in the cafeteria, having registered a 54% decrease compared to the previous year – and diesel consumed by the emergency power generators.

The reference indicator (kWh per employee) continued to evolve more favourably than the trajectory aligned with the 5% decrease by 2022 target and came in at 7% below the 2018 baseline.

Since the second semester of 2020 all electricity consumed at VdA's offices is now renewable.

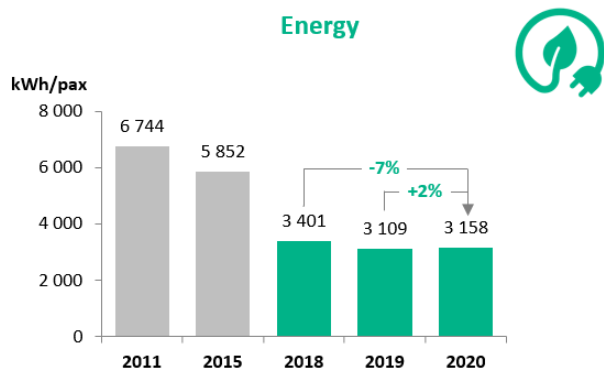


Fig. 2 – Energy consumption per employee

Mobility

In 2020, the strict restrictions on mobility imposed by the pandemic control measures caused a sharp decrease in all indicators associated to business travel: total distance travelled registered a 75% decrease in **absolute terms** (4.7 million less km travelled, across all forms of transport) and distance travelled **per employee** decreased by 74% (in 2020, each employee travelled 3,754 km on average, while in 2019 that value was 14,392 km).

Air travel continued to account for most of the km travelled (93% of total number of km); however, its use dropped drastically (75% less km travelled), contributing decisively to the decrease seen in all mobility indicators.

Other forms of transport also registered a significant reduction in use compared to 2019: -82% for rental cars; -58% for taxis and Uber and the use of personal vehicles for business purposes; and -51% for train.

The exceptional circumstances of 2020 radically changed the reference indicator (km per employee), which evolved far more favourably than the trajectory aligned with the 2022 target. The long-term adoption of new work models – including remote working, remote meetings and the use of digital collaboration tools – may prolong the environmental benefits of this new pattern of mobility.

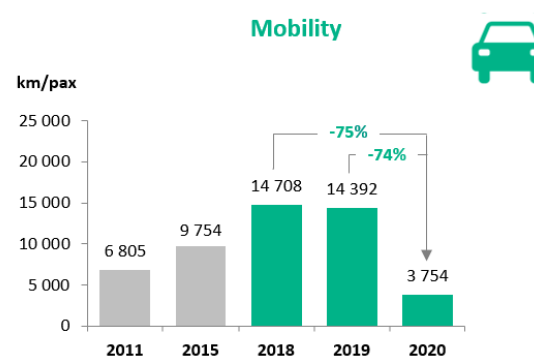


Fig. 3 – Distance travelled on business trips per employee

Resource Consumption

Water and waste

In 2020, absolute water consumption at VdA decreased by 40% in comparison to the previous year – an evolution similar to that of consumption *per employee* (-38%) – due to the significant drop in the occupancy rate of VdA's buildings in the three last quarters of the year, when many employees were working remotely.

The reference indicator (m3 per employee) thus evolved very favourably, beyond the trajectory aligned with the target of a 5% reduction by 2022.

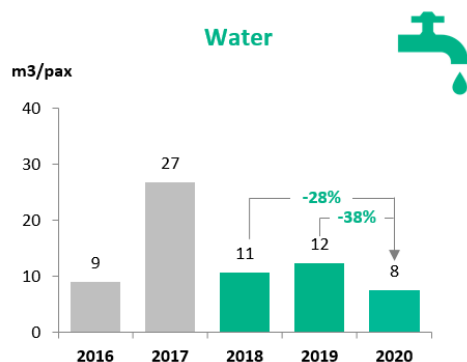


Fig. 4 – Water consumption per employee

The reduced use of VdA's facilities in 2020 also led to a decrease in the quantity of waste produced: -27% *in absolute terms* and -25% *per employee* when compared to the previous year. Each employee produced on average 113 kg of waste in 2020.

Of the 48.2 tonnes of waste produced, more than 70% was recycled, an amount almost 20% greater than that recycled in 2019.

The reference indicator (recycling rate) reached 71%, continuing to evolve more favourably than the trajectory aligned with the target of a 5% reduction by 2022.

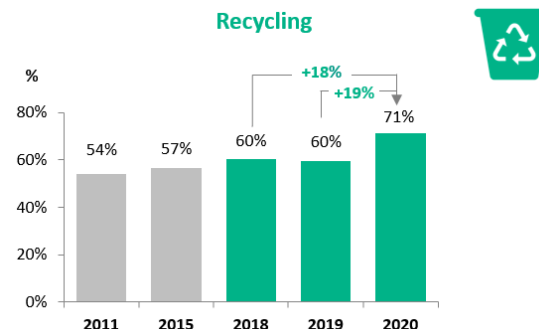


Fig. 5 – Waste recycling rate

Paper

The work model changes seen in 2020 also had an impact on paper consumption, which registered a decrease of 45% in *absolute terms* and 44% *per employee* in comparison with the previous year.

The Firm consumed 8.5 tonnes of paper (around 1.6 million A4 sheets) throughout the year. Each employee consumed on average 3,700 sheets of paper (about 15 per work day).

The reference indicator (kg per employee) thus evolved very favourably, outperforming the trajectory aligned with the target of a 5% reduction by 2022, coming in at 62% below the 2018 baseline.

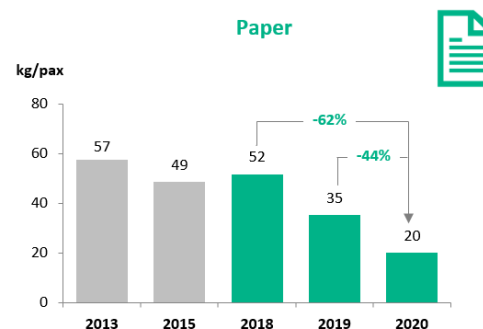


Fig. 6 – Paper consumption per employee

Carbon Emissions

VdA Carbon Footprint

Since 1 July 2020, all electricity consumed by VdA is from renewable sources. Its origin is certified by Guarantees of Origin, which guarantee production with zero carbon emissions at hydroelectric plants, in the case of the energy consumed in 2020. By using **100% renewable electricity**, VdA avoids the emission of around 430 tonnes of carbon per year on average and reduces its footprint by more than 50%, considering all sources of emissions.

This transition to renewable electricity in the second quarter of 2020 and the sharp drop in business travel helped reduce VdA's carbon footprint to 313 tCO₂e (tonnes of carbon dioxide equivalent), a decrease of almost 70% in **absolute terms** and of 68% **per employee**.

Tab. 1 – VdA Carbon Footprint: global results

	2011	2015	2018	2019	2020	Δ'19-'20 (%)
Employees (#)	228	296	410	438	427	-3%
Gross office space (m ²)	5 871	6 902	12 774	12 774	14 158	11%
Scope 1 emissions (t CO ₂ e)	49	37	11	10	7	-26%
Scope 2 emissions (t CO ₂ e) - Market-based method	472	815	467	339	105	-69%
Scope 2 emissions (t CO ₂ e) - Location-based method	547	461	397	485	414	-15%
Scope 3 emissions (t CO ₂ e)	177	283	671	668	201	-70%
Total emissions (t CO₂e) - Market-based method	697	1 135	1 149	1 016	313	-69%
Emissions per employee (t CO₂e/pax)	3,06	3,84	2,80	2,32	0,73	-68%
Emissions per floor space (t CO ₂ e/m ²)	0,12	0,16	0,09	0,08	0,02	-72%

Notes: (1) Total carbon footprint (Scope 1, 2 and 3) is now calculated considering the specific carbon content of purchased electricity (Market-based method). (2) 2016-2019 values of Scope 3 emissions revised based on updated calculation methodology.

The reference indicator (tCO₂e per employee) evolved positively, vastly surpassing the 5% reduction target set for the period 2018-2022 and coming in at 74% below the 2018 baseline.

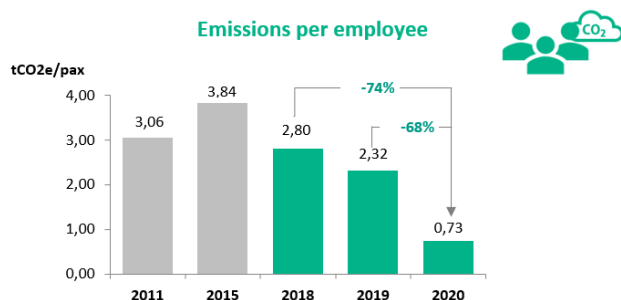


Fig. 7 – Emissions per employee

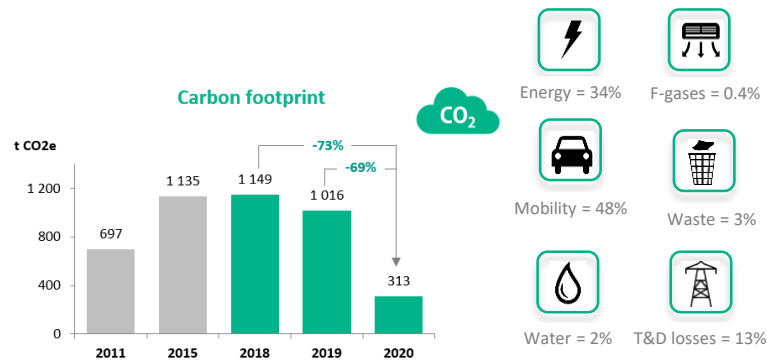


Fig. 8 – VdA Carbon Footprint: evolution and breakdown per source in 2020

In 2020, the breakdown of VdA's carbon footprint by source of emission changed slightly, having registered a decrease in emissions associated to the production of electricity consumed (-69%) and those resulting from business travel (-75%). These two sources represented 82% of the total footprint, when in previous years they jointly accounted for more than 90% of the total.

Emissions associated to the production of electricity lost in the transmission and distribution network now make up the most significant portion (13%), seeing as their calculation reflects the average carbon content of the electricity produced in Portugal and not of renewable electricity.

Protection of biodiversity and carbon sequestration

In the context of the protocol established with the Tapada Nacional de Mafra nature reserve, VdA supports the management of 31 ha of land populated by deciduous and coniferous species and with an estimated carbon sequestration capacity of 60 tCO₂ (VdA's Zero Carbon Zone).

This protocol involves the performance of forestry management activities (e.g. tree planting, pruning, forest clearing and forest fire prevention activities) and includes initiatives in which VdA employees participate.

ANNEXES



Resource Consumption – Detailed Information

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020									
	Unid		Δ'11-12 (%)	Δ'12-13 (%)	Δ'13-14 (%)	Δ'14-15 (%)	Δ'15-16 (%)	Δ'16-17 (%)	Δ'17-18 (%)	Δ'18-19 (%)	Δ'19-20 (%)									
On-site fuel consumption	kWh	160 448	104 831	-35%	100 232	-4%	67 865	-32%	114 924	69%	46 537	-60%	43 468	-7%	23 632	-46%	24 264	3%	12 266	-49%
Heating fuel	l	15 624	10 208	-35%	9 760	-4%	6 608	-32%	11 191	69%	4 532	-60%	4 233	-7%	n.a.		n.a.		n.a.	
Natural gas	kWh														20 650		24 264	18%	11 112	-54%
Diesel (emergency generators)	l														300		0	-100%	116	100%
Own fleet fuel consumption	l	2 393	2 424	1%	3 081	27%	2 747	-11%	3 223	17%	3 130	-3%	3 173	1%	2 623	-17%	1 918	-27%	1 374	-28%
Gasoline	l	2 393	2 424	1%	3 081	27%	2 747	-11%	3 223	17%	3 130	-3%	3 173	1%	2 623	-17%	1 918	-27%	1 374	-28%
Use of F-gases	kg																			
F-gases leakage	kg	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0		0		1	100%
Electricity consumption	kWh	1 377 137	1 263 980	-8%	1 185 500	-6%	1 141 406	-4%	1 617 173	42%	1 264 976	-22%	1 358 259	7%	1 370 588	1%	1 337 376	-2%	1 336 209	-0.1%
Electricity	kWh	1 377 137	1 263 980	-8%	1 185 500	-6%	1 141 406	-4%	1 617 173	42%	1 264 976	-22%	1 358 259	7%	1 370 588	1%	1 337 376	-2%	1 336 209	-0.1%
Business travel in third party vehicles	km	1 517 335	1 568 464		1 347 003		1 535 795		2 841 024	85%	4 361 557	54%	6 239 942	43%	5 993 005	-4%	6 276 192	5%	1 583 241	-75%
Airplane	pkm	1 358 044	1 396 324	3%	1 197 514	-14%	1 364 356	14%	2 670 533	96%	4 176 345	56%	6 064 098	45%	5 692 612	-6%	6 021 513	6%	1 484 745	-75%
Short-haul	pkm	2 998	5 709	90%	4 111	-28%	10 081	145%	23 270	190%	42 185	44%	31 327	-26%	74 245	137%	49 513	-33%	7 274	-85%
Medium-haul	pkm	573 255	443 487	-23%	509 478	15%	498 213	-2%	839 837	69%	908 301	8%	1 249 274	38%	1 672 681	34%	1 293 858	-23%	317 889	-75%
Long-haul	pkm	781 792	947 127	21%	683 925	-28%	856 062	25%	1 801 426	110%	3 225 860	79%	4 783 497	48%	3 945 686	-18%	4 678 142	19%	1 159 582	-75%
Train	pkm	34 545	41 035	19%	34 145	-17%	42 984	26%	37 733	-12%	34 854	-8%	23 278	-33%	63 680	174%	73 570	16%	35 820	-51%
Taxi	vkm	25 455	16 984	-33%	13 285	-22%	16 625	25%	22 315	34%	20 888	-6%	26 289	26%	50 145	91%	55 555	11%	23 319	-58%
Rent-a-car	vkm	28 758	31 364	9%	21 557	-31%	11 035	-49%	10 709	-3%	25 501	138%	55 450	117%	128 823	132%	55 542	-57%	9 821	-82%
Own car at the firm's service	vkm	70 532	82 757	17%	80 501	-3%	100 795	25%	99 734	-1%	103 969	4%	70 827	-32%	57 745	-18%	70 012	21%	29 536	-58%
Waste production		34 769	34 963	1%	36 859	5%	29 484	-20%	31 836	8%	35 224	11%	42 553	21%	70 292	65%	65 722	-7%	48 217	-27%
Recycled	kg	18 794	20 554	9%	22 579	10%	17 080	-24%	18 074	6%	19 572	8%	24 031	23%	42 522	77%	39 196	-8%	34 289	-13%
Unsorted	kg	15 975	14 409	-10%	14 280	-1%	12 404	-13%	13 762	11%	15 652	14%	18 522	18%	27 771	50%	26 526	-4%	13 928	-47%
Water consumption																				
Water consumption	m3										2 979		9 819	230%	4 346	-56%	5 393	24%	3 241	-40%
Paper consumption																				
Paper	kg										27 255	89%	18 409	-32%	21 200	15%	15 439	-27%	8 482	-45%

Notes:

Fuel consumption of the Firm's vehicles does not include partners' vehicles.

Waste: In 2011 and 2012, estimated waste production was based on ratio per employee. Since 2013, the estimate has been calculated based on the actual number of bags of waste produced and kg per bag ratio.

Methodology was improved in 2018. Data not available for VdA's Oporto office.

Carbon Footprint – Detailed Information

	Unid	2011	2014	2015	2016	2017	2018	2019	2020	Δ'19-'20 (%)	Δ'18-'20* (%)
Scope 1	t CO2e	49	24	37	19	18	11	10	7	-14%	-36%
On-site fuel combustion	t CO2e	43	17	29	12	11	5	5	3	-1%	-48%
Own fleet fuel combustion (motorbikes)	t CO2e	6	7	7	7	7	6	5	3	-25%	-46%
F-gases leakage	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0	0	1	0%	100%
Scope 2 - Market-based method	t CO2e	472	308	815	469	568	467	339	105	-27%	-77%
Scope 2 - Location-based method	t CO2e	547	349	461	346	474	397	485	414	22%	4%
Electricity - Market-based method	t CO2e	472	308	815	469	568	467	339	105	-27%	-77%
Electricity - Location-based method	t CO2e	547	349	461	346	474	397	485	414	22%	4%
Scope 3	t CO2e	177	162	283	464	679	671	668	201	0%	-70%
Business travel	t CO2e	164	154	274	412	594	601	593	147	-1%	-76%
Airplane	t CO2e	140	130	249	383	565	554	554	133	0%	-76%
Train	t CO2e	1	1	1	1	1	2	2	1	-6%	-73%
Taxi	t CO2e	5	3	4	4	5	9	11	5	18%	-50%
Rent-a-car	t CO2e	5	2	2	5	10	24	11	2	-54%	-92%
Own car at the firm's service	t CO2e	13	18	18	19	13	11	14	6	30%	-45%
Waste treatment	t CO2e	13	8	9	10	12	19	17	9	-11%	-54%
Water	t CO2e				8	26	12	11	6	-8%	-49%
Water treatment	t CO2e				1	3	1	2	1	24%	-25%
Wastewater treatment	t CO2e				7	23	10	9	5	-13%	-52%
Electricity T&D losses	t CO2e				34	46	39	47	40	21%	1%
TOTAL (scope 1, 2 e 3) - Market-based method	t CO2e	697	494	1 135	952	1 265	1 149	1 016	313	-12%	-73%

Accounting Methodology

VdA's 2020 carbon footprint was calculated in accordance with the Greenhouse Gas Protocol methodology, applied to the legal sector in line with the Legal Sustainability Alliance guidelines, which are recognised as the international reference for measuring this sector's carbon emissions.

The GHG Protocol Scope 2 Guidance was also followed when accounting and reporting VdA's emissions resulting from the consumption of electricity.

The Firm's carbon footprint is presented taking into account all Scope 1, 2 and 3 emissions and based on Scope 2 emissions calculated in accordance with the market-based method, which reflects the specific carbon content of purchased electricity.

Scope

The calculation of emissions only considers VdA's activity in Portugal (at its Lisbon and Oporto offices). The offices and activities of the VdA Legal Partners international network were not accounted for, seeing as their operation is the responsibility of each local partner.

All direct sources of emissions (Scope 1) and indirect sources associated to purchased electricity (Scope 2) were accounted for. Scope 3 included emissions relevant to the Firm's activity, namely those resulting from business travel, the treatment of waste and wastewater produced at its offices, the treatment of consumed water and losses in the transmission and distribution of purchased electricity.

Data on paper consumption is also presented. However, the emissions associated to paper's life cycle have not been taken into account when calculating VdA's carbon footprint.

Calculation Parameters

All six greenhouse gases covered by the Kyoto Protocol were considered. The results are presented in CO₂ equivalent, using the Global Warming Potential (GWP) values published by the Intergovernmental Panel on Climate Change (IPCC – Fourth Assessment Report).

Emissions were calculated based on data representative of VdA's activity in 2020. Emission factors defined by the IPCC were applied to this data and then adapted to the Portuguese reality based on data published by official national entities.

The following specific criteria were also applied:

- **Electricity** – Market-based method: annual emission factor for the reporting year, published by VdA's electricity supplier. Since the second semester of 2020 the electricity consumed at VdA is 100% renewable with a zero emission factor; Location-based method: average emission factor of mainland Portugal's power grid (electricity production, most recent data published by the European Environmental Agency).
- **Air travel** – Emission factors per passenger.km for each type of flight (short, medium or long-haul). In accordance with the LSA Protocol guidelines, the Radiative Forcing Index (RFI) was not applied to these emissions.
- **Train travel** – Emission factor representative of Portugal's public railway transport network.
- **Travel by rental car or personal vehicle** – Emission factor representative of the average light-duty passenger vehicle (petrol or diesel-run) circulating in Portugal.
- **Waste treatment** – Emission factor representing the total period of waste degradation in landfill (30 years). Emissions linked to recycling and energy recovery are considered void, as these are allocated to the respective sectors of activity.
- **Treatment of water consumed and wastewater produced** – Emission factors representative of the corresponding processes.
- **T&D losses of electricity consumed** – Emission factor representative of losses in mainland Portugal's power grid (% of losses published by the Directorate-General of Energy and Geology and average emission factor of national grid).

Data Collection: Procedures and Assumptions

The data here presented on VdA's activity in 2020 was obtained as follows:

- **On-site fuel consumption** – Data extracted from supplier invoices (natural gas) and building's maintenance records (diesel emergency power generators and motor pump).
- **Fuel consumption of the Firm's vehicles** – Calculated based on the Firm's accounting movements and the average annual price of fuel in 2020 (*source: Directorate-General of Energy and Geology*). Only fuel consumed by VdA's motorbikes (used for deliveries) was considered. The refuelling of partners' cars was excluded.
- **Electricity consumption at the Firm's premises** – Data extracted from supplier invoices.
- **Air travel** – Register of flights. Distances were calculated based on the origin-destination pair approach, plus the adjustment factor (non-direct routes and waiting time for landing).
- **Train travel** – Calculated based on the Firm's accounting movements, identifying origin-destination pairs based on the cost/type of trips between Portugal's main train stations (Lisbon, Oporto, Coimbra, Faro and Aveiro).
- **Travel by taxi** – Calculated based on the Firm's accounting movements and the average price per km charged for taxi rides (according to the price list in force in 2020 and based on the standard urban daytime rate) in a four-seater car, with no additional charges (*source: Directorate-General for Economic Activities and Antral*). Uber trips were also included based on billing information (namely, km travelled).
- **Travel by rental car** – Calculated based on the Firm's accounting movements and the number of km charged in the service provider's invoices. Petrol supply was not taken into account in order to avoid double counting.

- **Business travel using personal vehicle** – Calculated based on the Firm's accounting movements and fixed reimbursement amount per km. Petrol supply was not taken into account in order to avoid double counting.
- **Waste production** – Calculated based on daily tally of bags collected with each type of waste and the weight (kg) per bag ratio.
- **Water consumption** – Information extracted from water bills.
- **Disposal of wastewater** – Calculated based on water consumption levels.
- **Electricity losses in the transmission and distribution networks** – Calculated based on electricity consumption and % of losses registered in the electrical transmission and distribution networks in Portugal.

Data Limitations

In 2020, it was not possible to collect data on:

- Waste produced at VdA's Oporto office.



VdA LEGAL PARTNERS

ANGOLA | CABO VERDE | CAMEROON | CHAD | CONGO | DEMOCRATIC REPUBLIC OF THE CONGO | EQUATORIAL GUINEA | GABON
| MOZAMBIQUE | PORTUGAL | SAO TOME AND PRINCIPE | TIMOR-LESTE