

GAMESA GREENHOUSE GAS (GHG) EMISSIONS REPORT 2015



Wind farm San Pedro de Chiloé (Chile)



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Greenhouse Gas Emissions Report 2015, according to Standard ISO 14064-1

1.- PRESENTATION

The purpose of this report is to present the GHG inventory of Gamesa Corporación Tecnológica, and the Societies that conforms it, responding to the requirements set by ISO 14064-1.

Gamesa Corporación Tecnológica, SA, hereinafter ("Gamesa") publishes this report in order to communicate verification of the inventory of greenhouse gases and report transparently to all its customers and stakeholders of Gamesa emissions in accordance with the commitments made in its environmental policy.

This report contains an inventory of greenhouse gases by 2015 for the activities of Gamesa in its global activities, in all of the countries where it is performing professional activities.

The report has been made in accordance with the requirements of the UNE-ISO 14064-1: "Greenhouse gases. Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals. "It includes all the required information, except that such standard does not considered mandatory and has not been considered relevant following the principle of relevance.

The Gamesa responsible of GHG report is Mr. Iñaki López Biain.

Inventory Verification Greenhouse Gases was performed with an accredited verifier, TÜV, according to ISO 14064-3, "Specification with guidance for the validation and verification of greenhouse statements."

Inventory Verification Greenhouse Gases was performed with a limited assurance engagement.

2- ORGANIZATION DESCRIPTION

With 21 years' experience and close to 33,500 MW installed, Gamesa is a global technological leader in the wind industry. Its comprehensive response includes also the wind turbine's operation and maintenance services, that manages for more than 20,600 MW.

The company has production centres in the main wind markets: Spain, China, India, USA and Brazil.

Gamesa is also a world leader in the development, construction and sale of wind farms, having installed more than 7,000 MW worldwide.

The annual equivalent of its 33,500 MW installed amounts to more than 7,1 million tons of petroleum (TEP) per year and prevents the emission into the atmosphere of more than 50 million tonnes of CO2 per year.

Gamesa forms part of the main international sustainability indexes: FTSE4Good and Ethibel.

On the other hand, Gamesa has owned several wind farms, some of which are experimental and generate and inject energy into the network with zero emissions. In 2015 the clean energy generated by the 63 Gamesa wind turbines has been of 400.000Mwh equivalent to near 1400 Tj on year 2015.



3- POLICIES AND STRATEGIES

Gamesa is fully committed to continuous improvement and collaboration in order to achieve sustainable development, by developing and applying best practices aimed at environmental protection, under a preventive approach, and by promoting information and training in this culture.

The general rules of professional conduct that promote the preservation of the environment is one of the basic principles of activity of the company, which is ensured through the adoption of sound environmental policy and the implementation of an environmental management system.

All people working in Gamesa must know and accept this policy and act at all times in accordance with the criteria that inspires respect and sustainability, adopting habits and behaviors related to good environmental practices and contribute positively and effectively to achieving the objectives established, striving to minimize environmental impacts arising from their activities and use of facilities, equipment and working means at their disposal, ensuring efficient use of them.

4.- ORGANIZATIONAL BOUNDARIES

To define the boundaries of the organization, is selected the operational control approach, since it is the approach that best represents the organization's activities with respect to the work centres performing operational control of the activity and is the focus allowing greater potential for reducing GHG emissions.

Given the number of companies that make Gamesa and after an exhaustive analysis, it appears that many companies are virtual companies and do not have human or material resources, and therefore are not emitting GHG's

Using this approach, are considered specifically for the emissions account within the scope Gamesa Societies and centres with its own staff and resources and therefore with consumption of energy and GHG emissions as detailed in this report.

5.- UNSHARED SOCIETIES INCLUDED AT THE EMISSIONS REPORT:

Company	Registered in	Incorporation date
Gamesa Corporación Tecnológica, S.A. Parque Tecnológico de Bizkaia Edificio 222, 48170 (Vizcaya)	Vizcaya (España)	28/01/1976
Gamesa Energía, S.A. Unipersonal (GESA) Parque Tecnológico de Bizkaia Edificio 222, 48170 (Vizcaya)	Vizcaya (España)	19/11/1992
Gamesa Electric, S.A. Unipersonal Parque Tecnológico Edificio 100 , 48170 Zamudio (Vizcaya)	Vizcaya (España)	06/06/2005
Cantarey Reinosa, S.A. Unipersonal Paseo Alejandro Calonge 3, 39200 Reinosa (Cantabria)	Cantabria (España)	17/03/1997
Enertron, S.L. Unipersonal Avda. Fuentemar,5, 28823 Coslada (Madrid)	Madrid (España)	12/11/1979
Valencia Power Converters, S.A. Unipersonal (VPC) Parque Empresarial Turianova, Ctra. A Olocau , 46181 Benissano (Valencia)	Valencia (España)	05/10/2005
Gamesa Energy Transmission, S.A. Unipersonal (GET) Parque Tecnológico Edificio 100, 48170 Zamudio	Vizcaya (España)	11/06/2004
Transmisiones Eólicas de Galicia, S.A. Unipersonal (TEGSA) Parque Tecnológico de Bizkaia Edificio 222, 48170 (Vizcaya)	Vizcaya (España)	04/10/1996
Especial Gear Transmissions, S.A. Unipersonal (EGT) Poligono Ind. Trobika, 48100 Mungia (Vizcaya)	Vizcaya (España)	15/12/1997
Fundición Nodular del Norte, S.A. Unipersonal (FNN) Pol. Ind. Villalonquejar, C/Condado de Treviño, 09001 (Burgos)	Burgos (España)	09/02/2001
Gamesa Eólica, S.L. Unipersonal (GEOL) Poligono Ciudad de la Innovación, C/ Ciudad de la Innovación 9-11 31621, Sarriguren (Navarra)	Navarra (España)	10/11/2006
Gamesa Wind Energy Services, Ltd "Barbaros Mah. Halk Cad. No:8/A Palladium Ofis ve Residence Binasi Kat:2-3 34746 Atasehir, Istanbul	Turquía	28/05/2010
Gamesa Innovation & Technology, S.L. Unipersonal (GIT) Ciudad de la Innovación, 9-11, 31621 Sarriguren (Navarra) GIT-Sarriguren 1; GIT-Sarriguren 2; GIT-Plaza Europa 12-14-15; GIT-Edif. Oritz / Alaiz; GIT-C/Olite; La	Navarra (España)	26/06/2006



Сотрапу	Registered in	Incorporation date
Gamesa Eólica Francia, SARL Parc Mail 6, Allée Irene Joliot Curie Bâtiment B 69791 Sant Priest	Francia	27/07/2001
Gamesa Eólica Italia, S.R.L. (GEOLITA) Via Mentore Maggini 48/50 00143 Roma	Italia	06/07/2004
Gamesa Eólica Greece, M.E.P.E. 9, Adrianeiou, 115 25, Atenas	Grecia	21/12/2006
Gamesa Wind Hungary, Ktf 1146 Budapest, Hermina út-17	Hungría	05/04/2006
Gamesa Wind Turbines Private Ltd 2 No 334, 8th Floor, Block B, The Futura IT Park, Old Mahabalipuram Road, Sholinganallur, Chennai -600 11	India	05/04/2006
Gamesa Japan K.K. Daiwa Jisho Building 4F – 411, 74-1 Naka-ku, Yamashita-cho, Yokohama-city 231-0023, Kanagawa/Japan.	Japón	02/07/2007
Gesa Eólica Mexico, S.A. de CV 2 Torre Diana, Piso 14, Av. Pº de la Reforma 389, Colonia Cuahtemoc, Mejico DF, 06500	Méjico	26/02/2007
Gamesa Wind Tianjin Co, Ltd 63 Outside the outer rin, road of Huayan Indt. Dev. Area, Hua Yu High- New Technical Indt. Park, 300384, Tianjin	China	23/12/1999
Jilin Gamesa Wind Co, Ltda. Wulanchabu City, Inner Mongolia	China	05/03/2010
Inner Mongolia Gamesa Wind Co, Ltda Wulanchabu City, Inner Mongolia	China	05/03/2010
Gamesa Blade Tianjin Co. Ltd № 10-11-12-16 XiangZun Road, TianXiang Indt. Park, Xiqing Economic Development Area, 300384 Tianjin	China	31/08/2006
Gamesa Wind Poland, Sp. Zoo 3 Krucza 16-22; 00-526 Warsaw	Polonia	13/06/2007
Gamesa II Eólica Portugal, Sociedade Unipessoal Lda. Nucleo Empresarial II, Rua da Bica Armazem H, freguesia de venda conclho de Mafra, 2665-608, Venda do Pinheiro	Portugal	01/04/2008
Gamesa Wind Bulgaria, EOOD 14, Tsar Osvoboditel Blvd, floor 1., 1000 Sofia	Bulgaria	20/09/2009
Gamesa Singapore Private Limited 8 Marina Boulevard #05-02, Marina Bay, Financial Centre Tower 1 - Singapore 018981	Singapur	17/08/2010
Gamesa Wind UK Limited 39-49 Commercial Road Southhampton Hampshire SO15 1GA	Reino Unido	08/09/2010
Gamesa Inversiones Energéticas Renovables SCR de Régimen Simplificado, S.A. Parque Tecnológico Edificio 222, 48170 Zamudio	Vizcaya (España)	21/03/2006
Sistemas Energéticos Arinaga, S.A. Unipersonal Avda. Mesa y Lopez, 59 Las Plamas de Gran Canaria	Canary Islands	17/12/2004
Sistemas Energéticos La Cámara, S.L. Avda. Eduardo dato 69, 3ª 41005 Sevilla	Seville (Spain)	20/12/2010
Sistemas Energéticos Boyal, S.L. Pol Ind San Cristobal nº 41, 47012 (Valladolid)	Valladolid (Spain)	27/06/2001
Sistemas Energéticos Cabezonegro, S.A. c/ José Luis Alvareda 1B,1º 5004 Zaragoza	Zaragoza (Spain)	28/12/2006
Sistemas Energéticos La Plana, S.A. Pol. Ind. Alfred Nobel 4, Villanueva de Gallego	Zaragoza(Spain)	16/06/1999
ingbo SPW AB, Bibliotekstorget, 8 (Solna), Stockolm	Sweden	29/07/2011
Pocahontas Prairie Wind, LCC. Northbrook Drive, Trevose, PA 19053	USA	15/03/2006
Gamesa Energie France, SAS Parc Mail 6, Allée Irene Joliot Curie Bâtiment B 69791 Sant Priest	Francia	30/12/2003
Gamesa Energiaki Hellas, S.A. 9, Adrianeiou, 115 25, Atenas	Grecia	16/11/2000
Gamesa Energía Italia, S.P.A. Via Mentore Maggini,48/50CAP 00143	Italia	31/05/2000
Gamesa Energía Polska, Sp. Zoo Krucza 16-22; 00-526 Warsaw	Polonia	08/04/2006
Gamesa Energía Portugal, S.A. Rua Iracy Doyle, nº43 A, 1ºdireito 2750-377 Cascais	Portugal	02/02/1999
Gamesa Energy UK, Ltd Rowan House, Hazell Drive. Newport, Wales. NP10 8FY	Reino Unido	18/05/2003
Gamesa Bulgaria Eood 14, Tsar Osvoboditel Blvd, floor 1. , 9000 Sofia	Bulgaria	29/06/2006
Gamesa (Beijing) Wind Energy System Development Co, Ltd Room 605,CBD International Building,№16, Yong An Dong Li, Chaoyang District, 100022, Beijing	China	10/07/2007
Gamesa Energy Romania, Srl (antes Carpathian Wind, SRL)6 Calea Floreasca 4th. Office nº 2092. Sector 1 Bucharest	Rumanía	05/04/2007



Company	Registered in	Incorporation date
Gamesa Eólica Brasil, Ltd. Avda. Trancredo Neves 1283, Edificio Omega, sala 902, Caminho das Arvoes, 41820-021, Salvador de Bahia	Brasil	08/01/1999 ¹
Gamesa Technology Corp, INC 2050 -Cabot Blvd. West Langhorne PA 19047	USA	13/01/2005
Gamesa Wind US, LLC 2050 -Cabot Blvd. West Langhorne PA 19047	USA	04/08/2003
Gamesa Wind PA, LLC 400 Gamesa Drive Fairless Hills, PA 19030	USA	17/05/2005
Gamesa Sucursal de Made en Tánger Lot 345, Z.I. GZENNAYA, A. Boite Poste nº397 Tanger (boukhalef) Gamesa Eólica Branch in UK 81 Oxford St W10 2EU	MarruecosReino Unido	30/05/200707/02/ 2006
Gamesa Eólica Branch in Egypt 12 Dar El Shefa St. Garden City., 11451 El Cairo. Egypt Gamesa Sucursal de Made en Tánger Lot 345, Z.I. GZENNAYA, A. Boite Poste nº397 Tanger (boukhalef)	EgiptMarruecos	01/04/200530/05/ 2007
Gamesa Wind Tianjin Co.Lts Shanghai Branch Room 17F,No.369 Jiang Su Road, Chang Ning District ,Shang Hai Gamesa Eólica Branch in Egypt 12 Dar El Shefa St. Garden City., 11451 El Cairo. Egypt	ChinaEgipt	01/04/2005
Compass Transworld Logistics, S.A. (CTL) (Adquired 100% at year 2014) Gamesa Wind Tianjin Co.Lts Shanghai Branch Room 17F,No.369 Jiang Su Road, Chang Ning District ,Shang Hai	Navarra (España)China	10/09/2007

6.- OPERATIONAL BOUNDARIES

Within operational limits, and in accordance with the requirements of ISO 14064:1 is separately accounted for the following types of emissions:

- Direct emissions a census of all direct emissions. If a direct emission source is excluded, may be justified in accordance with the principles expressed in the total coverage of ISO14064-1
- Indirect emissions from power a census of all the indirect emissions from energy. If an indirect emission source is excluded, may be justified in accordance with the principles expressed in the total coverage of ISO14064-1
- Other indirect emissions Have been recorded in 2015 emissions from transport of wind turbine components to their destination at the wind farm, including combinations of road and maritime transport.
- CO₂ emissions from biomass combustion and other sources of carbon emissions from short-cycle are not used by Gamesa.

For the preparation of emission inventory GHG will consider the following according to ISO 14064-1:

GHG to consider					
CO ₂	SF ₆				
CH ₄	PFCs				
N ₂ O	HFCs				

¹ 08/01/1999 (Registry DATE) / 3-10-1998 constitution date

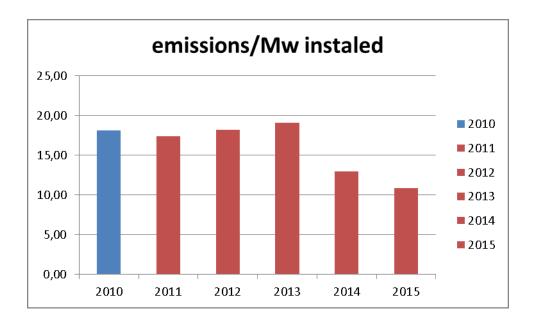


7.- SELECTION AND STABLISHMENT OF BASE YEAR

The initial base year is 2010. According to the verified carbon footprint report of that year.

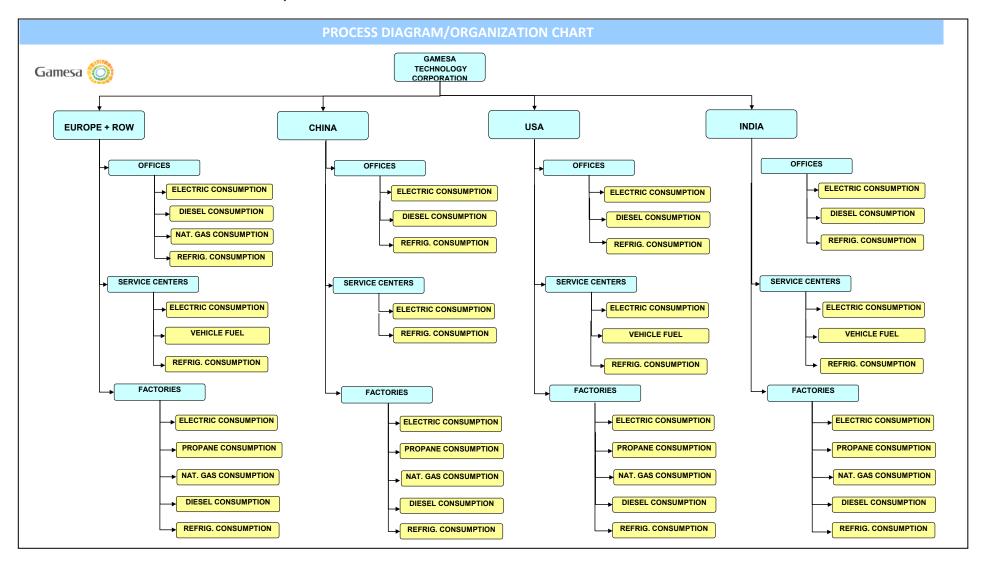
The calculation of base year inventory follows the same methodology for calculating the inventory of any other year.

Emissions evolution year by year is shown on the next chart:



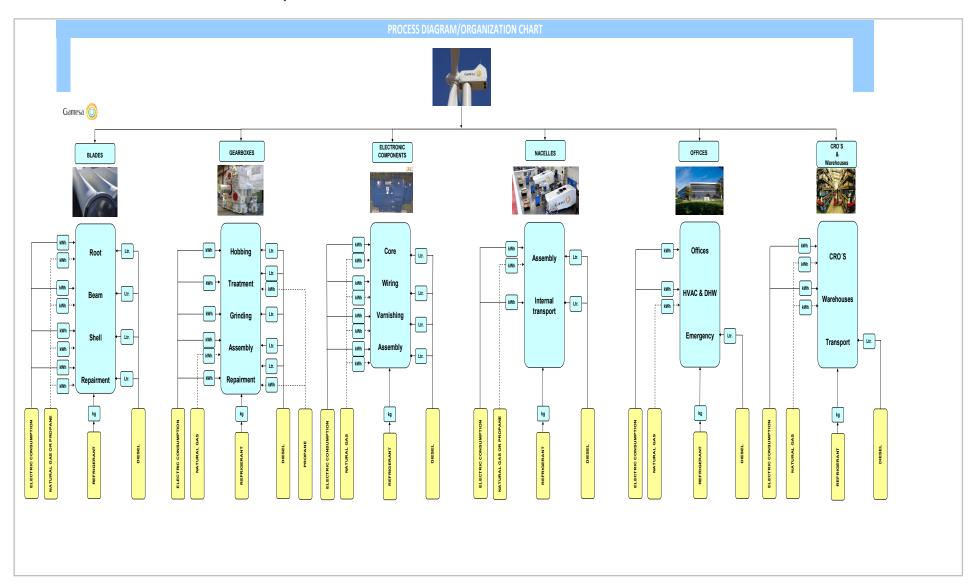


8.- EMISSIONS SCHEME BY PROCESSES/ORGANIZATIONAL





9.- EMISSIONS SCHEME BY PROCESSES / BY COMPONENT:





10.- DESCRIPTION OF CUANTIFICATION METHODOLOGIES

- Quantifying GHG emissions arises based on two calculation-based methodologies, depending on the type
 of emission source:
 - Emission sources in which there is a chemical transformation process (combustion, fixed or mobile)
 and indirect emissions from electricity generation consumed
 - Emissions Of. CO_2 (t CO_2 -e) = Activity data x Emission factor
 - Emission sources where there is no chemical transformation process (fugitive emissions), or in cases where the data are available in different units of issue tonnes of CO₂-e (eg: tonnes of CH₄)
 - Emissions of CO_2 (t CO_2 -e) = Emission data x Global warming potential

The emission factors and the greenhouse warming potential used and the corresponding sources are detailed at the Gamesa management system appendix PMA-1-007-A03

- The quantification calculation is based largely supported by data on activity indicators built into the Environment of Gamesa area that are related to energy consumption of the Company. This method performs the accounts of consumption and GHG emissions from the source of the most important centers, each center is responsible for monitoring their emissions. This system allows data to be adding the various geographical areas as well as the various technologies used in the processes of the Company.
- In the cases where there is not a periodic indicator it will be used other methods of reporting, usually annual report for the period booked.

11.- DIRECT EMISSIONS

The following direct emission sources have been identified

Energy direct emissions							
Point	Process /Activity	Generated GHG	Installation				
1.1	Natural Gas combustion	CO ₂ , CH ₄ , N ₂ O	Boilers				
1.2	Diesel combustion	CO ₂ , CH ₄ , N ₂ O	Power generador units, Boilers,				
1.3	Propane combustion	CO ₂ , CH ₄ ,N ₂ O	Production lines, forklifts				
1.4	Combustion of diesel and gasoline for automation	CO ₂ , CH ₄ , N ₂ O	Vehículos (pick ups)				
1.5	Air conditioner coolants	PFC's, HFC's	Air conditioning				
1.6	Dry ice	CO ₂	Dry ice				



12.- ENERGY INDIRECT EMISSIONS

The following direct emission sources have been identified

Energy indirect emissions					
Point	Process /Activity	Generated GHG	Installation		
2.1	Electricity consumption	CO ₂ , CH ₄ , N ₂ O	Power and lighting		

13.- OTHER INDIRECT EMISSIONS

The following other emission sources have been identified

Other Indirect Emissions						
Point	Process /Activity	Generated GHG	Installation			
3.1	Emmissions from logistic transportation	CO ₂ , CH ₄ , N ₂ O	Movile (Truck / Boat)			

14.- ASSESSING UNCERTAINTY IMPACT ON DATA

As data is coming from commercial invoices is not necessary to calculate the uncertainty, because as a commercial operation, the uncertainty of activity data is governed by legal procedures. From the theoretical point of view GCT has made the following analysis:

- The emission factors, caloric data value and oxidation factors used are considered null uncertain, because they come from recognized sources and since it is beyond the control of the organization.
- We analyze verification certificates measuring systems on truck tankers for liquids of low viscosity measurement uncertainties obtained less than 0.5%
- Also have been obtained certificates of calibration of measuring gages for natural gas. No results were
 obtained in any case exceeding 2% uncertainty, while the average of measurement uncertainty
 generally it was around 0.3%.
- Applying the principle of cost-effectiveness used in the European Trading Scheme Emissions, although there have been consultations to obtain these data are considered negligible.
- It is considered a fact with significant non-representative, the degree of uncertainty in the total emissions (according to the principle of relevance).

15.-EXCLUSIONS

Excluded from the inventory those sources identified or centers that represent less than 0.1% of total GHG emissions, as long as the total of exclusions does not exceed 5% of total issuance.

In this sense, figure on the exclusions made in accounting for GHG emissions centers that individually represent less than 0.1% of total emissions according to the following:

- Employees assigned to offices without data information: 325
- T Ratio of CO₂ -e for office staff: 0,8 t CO₂-e / employee (Maximum)
- GHG emissions are not counted: 260 t CO₂-e
- % Total GHG emissions are not counted:< 0,71%



In the Gamesa procedure PMA-1-007 "Greenhouse gas emissions cuantification system" the Annexes 1 and 2 are identified Gamesa Societies and the emission workcenters that are considered within the GHG inventory 's, and those companies usually subsidiary offices, in which Gamesa has no operational or financial control and therefore are not included in the report GHG emissions.

In this report are presented only the Companies and Gamesa's production centers that are considered GHG emitters have therefore been taken into account in the preparation of this report. (Points 5 and 6).

16.- GHG EMISSIONS INVENTORY CUANTIFICATION

We can observe the distribution of tons of CO_2 equivalent for each GHG and each of the emission sources of energy directly

2015 Direct emissions for each GHG						
		Combu	stion Gases			
	tCO ₂	tCH₄	tN ₂ O	tCO2-equiv Total		
Natural Gas	3.913,5	0,07	0,01	3.917,3		
Propane	483,7	0,01	0,00	484,1		
Diesel	835,9	0,03	0,01	838,8		
Dry ice	138,9	0,0	0,0	138,9		
Vehicle diesel	4359,8	0,18	0,04	4.374,6		
Gasoline	2210,4	0,12	0,18	2267,5		
Total:	11.999,8	0,4	0,2	12.021,2		

Separately expressed GHG emissions due to recharging of refrigerant gases in tonnes of CO₂ equivalent.

2015 direct emissions for each GHG									
			Refrige	rant gases				Dielectric	Total
R404a	R22	R407c	R410a	R417a	R422d	R134a	R401 a	SF ₆	(tCO₂-e)
(tCO ₂)	(tCO ₂)	(tCO ₂)	(tCO ₂)	(tCO ₂)	(tCO ₂)	(tCO ₂)	(tCO ₂ -e)	(tCO ₂ -e)	
0,0	0,0	57,6	0,0	0,0	0,0	0,0	0,0	0,00	57,6

Global emissions of the Organization in 2015, are shown in the following table, which identifies the different greenhouse gases by geographic area

2015 Global emissions								
			2015 Indirect emissions (Scope 2)	Total				
	Natural gas (tCO ₂ -e)	Propane (tCO ₂ -e)	Diesel (tCO ₂ -e)	Refrigerants (tCO ₂ -e)	Dry Ice (tCO ₂)	Vehicle fuel (tCO ₂ -e)	Electricity (tCO ₂ -e)	(tCO₂-e) Gamesa 2012
EMEA	3.435,1	482,0	425,7	57,6	138,9	4.374,5	14.924,1	23.819,6
USA	481,7	0	0	0	0	1.538,5	994,8	3.015,1
ASIA	0	0	116,2	0	0	0	3.321,0	3.437,2
INDIA	0	0	277,5	0	0	0,1	5.313,5	5.591,1
LATAM+ BRASIL	0,5	2,1	19,5	0	0	729,1	223,2	974,4
Total:	3.917,3	484,1	838,8	57,6	138,9	6.642,2	24.776,7	36.855,6



Comparing the GHG emissions from different geographical areas in emissions per employee per year for each of the regions we can see that there are some deviations, which are explained below

Emissions per employee (tCO ₂ -e) per employee/year	Mean staff 2015	Emissions per employee 2015
EMEA	4.082	5,8
USA	361	8,4
ASIA PACIFIC	631	5,4
INDIA	1567	3,6
LATAM	630	1,5
Total:	7.271	5,1

Furthermore the electricity mix and their emissions have varied substantially according to IEA statistics 2015, especially in China and India, resulting in a reduction of emissions per employee in different geographical areas.

Scope 3: Other indirect emissions: Logistic Transport

Emissions corresponding to logistic transportation by road and maritime are calculated for the delivery of products to the wind farm, of those products and components manufactured by Gamesa, during year 2015.

SCOPE 3: OTHER INDIRECT EMISSIONS									
Point	Transport	Distancia (Km)	CO ₂ (tCO ₂)	CH ₄	N ₂ O	t CO2 equiv.			
3.1	Road	4.392.335,0	4.337,6	0,1	0,2	4.384,8			
3.1	Marine	2.094.818	240.514	10	2	241.342,6			

17.- DIRECTED ACTIONS:

These actions have been implemented during 2015 at the attached plants and offices.

The targeted actions aimed at reducing consumption and energy efficiency are:

Factory	Initiative description	Consumption Avoided (Kwh)	Tonnes of CO ₂ -e saved	Statu s
ASTEASU	An improvement on the battery capacitors which has greatly reduced the effect of reactive power at the Asteasu production plant, which resulted in a saving of € 15,763.64 and 254.255,69 kWh. The investment of this improvement was of 16.000 euros Detailed information are prepared to be consulted	254.255,69	62,8	DONE
BURGOS	Change to led lighting system on pavilion 39 of Gamesa Burgos Factory. As the result of this improvement 22.547,66 kwh saved from the period of August to December of year 2015	22.547,66	5,6	DONE



SOMOZAS	The improvements are: - Modification contracted power - HVAC Automation of production plant - Central vacuum automation - Change boiler operating parameters - Climate change parameters - Total or partial shutdown of equipment rentals and weekends - Partial lighting control - Energy saving awareness training of personnel	Electricity: 938.525 Natural Gas: 1.510.317	Electricity: 231,8 Natural Gas: 304,85	DONE
		2.725.645,69	605	

18.- GHG EMISSION REDUCTION PROJECTS

GAMESA is the developer and current Focal Point of two GHG reduction projects. These are two wind power projects registered as Clean Development Mechanism (CDM) under the United Nations standards (UNFCCC), which will generate Certified Emission Reductions (CER) that can be used to offset GHG emissions. Both projects are located in the state of Oaxaca in Mexico and are currently in operation.

Project 1: Bii Nee Stipa

- Location: Juchitan de Zaragoza, Oaxaca (Mexico).
- Crediting Period: 31 December 2008 30 December 2018.
- CERs verified: GAMESA has obtained 10.230 CERs (= 10.230 tCO2) as of December 31, 2015.
- Project link: https://cdm.unfccc.int/Projects/DB/AENOR1129213791.04/view

Project 2: Bii Nee Stipa III

- Location: Juchitan de Zaragoza, Oaxaca (Mexico).
- Crediting Period: 31 December 2010 30 December 2020.
- CERs verified: No verification of emissions implemented yet.
- Project link: https://cdm.unfccc.int/Projects/DB/AENOR1152620563.37/view



19.- CONCLUSIONS

The year 2015 has been influenced by different aspects, as follows:

Gamesa was present at the COP21 global conference at Paris on December 2015 and the plans for carbon neutrality of the Company were shown at this international event.

As a main objective, Gamesa seeks to be carbon neutrality by the year 2025.

Becoming carbon neutral is one of the highest climate commitments that can have an organization as Gamesa, because according to the principal existing methodologies for determining neutrality involves a process of (i) calculation, (ii) reduction and (iii) offsetting.

Carbon neutrality and comprises individual commitments understood Gamesa for measurement, reduction and / or compensation of CO2 caused by the direct and indirect emissions of the Group over the next ten years (period 2015-2025).

The global roadmap aimed at fulfilling this commitment includes a combination of adaptation and mitigation actions such as:

- Energy efficiency measures to reduce by 2025 at least 10% of emissions in logistics and 15% reduction in emissions in the area of operations (measured in tCO2eq / MW installed).
- Measures for the purchase of clean electricity by 2025 for plants and offices.
- Adaptation measures such as the promotion and use of electric vehicles, mobility plans more environmentally friendly or projects to achieve complete recyclability of materials for wind turbines at the end of its life cycle.
- Clearing of CO2 emissions will be realized, depending on different scenarios, through the exchange of allowances.

Compensation mechanisms to implement CO2 emissions

Gamesa made compensation of CO2 emissions through emission reductions generated by projects promoted by the company in countries that are parties to the Kyoto Protocol but non-Annex I and help reduce emissions of greenhouse gases in them , so that the ultimate objective of the United Nations Framework Convention on Climate Change, to stabilize emissions of greenhouse gases that Gamesa are contributing.

These projects have been registered under the Clean Development Mechanism (CDM), so that generate Certified Emission Reductions (CER).

Gamesa has available CER generated by these projects to offset emissions associated with their carbon footprint. It currently has 10,200 CER and CER 2016 27,000 more will be added. It is expected that by 2018 can be achieved about 90,000 additional CER.

For the next 10 years it will be decided between different periods and scenarios for exchanging credits available emission reduction credits that will later be canceled in the register.

It is expected that Gamesa's commitment to achieve carbon neutrality (attached to the remainder of its shares on environmental and climate issues) positioned him as a leading company internationally.