

2016



SUSTAINABILITY

International **Post**  
Corporation



# POSTAL SECTOR SUSTAINABILITY REPORT 2016

**Maintaining the pace**



64 pages  
November 2016



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# TABLE OF CONTENTS



1	The Environmental Measurement and Monitoring System . . .	6
1.1	2008 - 2015 results. . . . .	8
	Carbon management. . . . .	8
	Delivery Efficiency . . . . .	9
	Carbon emissions. . . . .	10
	Business case. . . . .	11
	The road ahead for EMMS . . . . .	12
2	Posts' best practice cases . . . . .	16
3	Technical analysis . . . . .	36
3.1	Carbon Management Proficiency (CMP). . . . .	37
3.2	Delivery Efficiency . . . . .	45
3.3	Activity indicators. . . . .	54
4	Annexes . . . . .	56
	Indicator definitions. . . . .	56
	Member States' Nationally Determined Contributions (NDCs) . . . . .	57
	Exclusions and estimations . . . . .	58
	Allocation methodologies for letter mail and parcel emissions. . . . .	59
	PwC Letter of Assurance. . . . .	60
	IPC's sustainability performance . . . . .	62
	Acknowledgements. . . . .	63

# INTRODUCTION



On 12 December 2015, 195 countries adopted the Paris Agreement at the 21st Session of the Conference of Parties to the United Nations Framework Convention on Climate Change (COP21). By signing this agreement, parties pledge their commitment to a global action plan to reduce carbon emissions and limit global temperature rise to below 2°C.

Since 2008, IPC's EMMS programme has demonstrated the postal sector's commitment to reducing its emissions. In just six years, EMMS participants have already achieved the programme's 2020 target of a 20% reduction in Scope 1 and 2 (owned buildings and vehicles) carbon emissions. This is a tremendous accomplishment resulting from continuous collaboration and dedication. Since the start of the programme, solid progress has also been made in the Carbon Management Proficiency section of the EMMS, in which we are well on track to reach the 90% target ahead of the 2020 deadline.

While posts continue to make efforts to reduce emissions from their own operations, many are also taking pro-active measures to decrease emissions associated with activities in their value chain, setting out to improve efficiency in all aspects of their operational reach. This concentration on the value chain is of particular importance given the current trend of increasing parcel volumes, which is largely attributed to the rise in e-commerce. Higher parcel volumes have increased the need for outsourced transport, and it is in recognition of this trend that we made the decision to extend the programme's target to include Scope 3 emissions generated by sub-contracted and outsourced activities. This ensures that supply chain management is a priority focus. In order to improve sustainability throughout the postal value chain, postal operators will need to increasingly engage with suppliers and further align their procurement decisions with sustainable considerations. It is therefore imperative that participants maintain their current momentum in this respect.

The programme's success to date has led the EMMS group to embark on new opportunities through which we can continue to drive positive climate action. In 2014, a new delivery efficiency target was formally introduced for the group to broaden the programme's scope and continue our emissions reduction efforts. The new target aims to achieve a 20% reduction in Scope 1, 2, and 3 (outsourced transport) emissions per letter mail and per parcel by 2025, from a 2013 baseline.

In January 2016 the EMMS delivery efficiency target was approved as a sectoral benchmark by the Science Based Targets (SBT) initiative's Steering Committee. This ensures that our target aligns with the latest climate science, and that our emissions reductions are in line with the reductions required to meet the Paris Agreement's goal. At the time this placed IPC (and more precisely its EMMS programme) within a group of only 12 organisations globally to have an approved science based target.

The continuous improvement in carbon management and associated emissions reductions achieved by our participants is highly impressive. Our participants are increasingly switching to 100% renewable electricity, with five posts having already taken this step, and many are also implementing strategies to further reduce their carbon footprint. It is fantastic to see no less than 18 of our participants showcasing initiatives such as building energy efficiency improvements, investment in alternative-fuel technologies in vehicle fleets, and installation of renewable energy infrastructure on buildings in the Case Studies section in this report.

Not only do these initiatives have substantial environmental benefits, but they also generate considerable financial returns. For example, using conservative estimates the group has achieved a financial saving of €1,279m (US\$1,418m) through reduced fuel and electricity consumption since the start of the programme in 2008. These initiatives demonstrate that EMMS participants are clearly committing to more significant and long-term investments that will drive substantial emissions reductions, giving us confidence that participants will achieve our ambitious new efficiency targets.

Through the EMMS programme, one of the few global sector-wide initiatives that sets out to reduce carbon emissions, participants, and IPC, continue to reaffirm their commitment to enhancing the sustainability of the postal sector. In doing so, we are making an important contribution to wider sustainability challenges on the global agenda. It is IPC's ambition to integrate climate change and sustainability into the postal sector's long term development and strategy, and thereby fully align with the global objectives set out in the United Nations Sustainable Development Goals (SDGs) and the Paris Climate Agreement.

Through continued engagement, collaboration, and innovation, we intend to follow up on our commitment to our stakeholders by driving positive change and thereby secure a sustainable future for the postal sector.

# 1. EMMS



**IPC's Environmental Measurement and Monitoring System (EMMS) programme** is a sector wide initiative acting to mitigate the impacts of global climate change via a collaborative approach to reduce carbon emissions. The EMMS programme was developed in 2008 in response to stakeholder and CEO requests for the postal sector to minimise its carbon footprint following concerns regarding the contribution of the sector to greenhouse gas emissions. The EMMS programme is a global initiative, consisting of 20 participants from five continents – Africa, Asia-Pacific, Europe, North America, and South America. The 2016 IPC Postal Sector Sustainability Report analyses data reported for the 2015 calendar year.

# 20%

TO ACHIEVE A 20%  
REDUCTION IN CARBON  
EMISSIONS (SCOPE 1, 2  
AND 3 - OUTSOURCED  
TRANSPORT ONLY) PER  
LETTER MAIL AND PER  
PARCEL BY 2025, FROM  
A 2013 BASELINE.

Following a pilot in 2008, the full EMMS programme was launched in 2009, capturing data and measuring progress for the 2008 calendar year. In line with the programme's aim to reduce carbon emissions across the sector, IPC and the programme's original 20 participating posts together set two ambitious targets to be achieved collectively by the EMMS group by 2020 (from the 2008 baseline year):

- To achieve a score of at least 90% in carbon management proficiency
- To reduce combined carbon emissions from own operations by 20%.

The group successfully reached the 20% emissions reduction target in 2014, six years ahead of schedule (see the 2015 IPC Postal Sector Sustainability Report). Nonetheless, further progress on absolute carbon emissions reductions beyond the 20% target will still be reported until 2020. Meanwhile, recognising participants' continuous improvement in carbon efficiency, a new target was introduced for the group in 2014:

- To achieve a 20% reduction in carbon emissions (Scope 1, 2 and 3 – outsourced transport only) per letter mail and per parcel by 2025, from a 2013 baseline.

The underlying principle of the EMMS programme is that significant, systematic, and sustainable carbon emissions reductions can only be achieved through a comprehensive approach to carbon management. The programme provides a common carbon measurement and reporting structure that enables participants to share their carbon and environmental management strategies, performance, and achievements. There are multiple stages of data collection involved in the EMMS process. The first stage is a qualitative section, which requires participants to complete a comprehensive self-assessment questionnaire to assess their carbon management proficiency.

Ten management pillars are considered, including Policy and Procedures, Activity, Measurement and Verification, and Targets. The next stage of the process is the quantitative section, which requires participants to report carbon emissions and other operational data in order to measure carbon efficiency and thereby assess the efficacy of participants' carbon management systems.

IPC works closely with Verisk Maplecroft, an independent global risk analytics and advisory firm, to develop and deliver the annual Sustainability Reports and broader EMMS programme. Verisk Maplecroft undertakes inspections of participant data via multiple rounds of plausibility checks and review of supplementary evidence in order to ensure consistently high levels of accuracy. To promote continuous improvement, participants' data is analysed on an individual basis and detailed Assessments for individual posts are jointly developed. In addition, IPC collects, aggregates, and analyses data at the group level and reports on the results of the EMMS programme annually in the form of publically available Sustainability Reports. We ensure our data is accurate and credible through a third-party review from our external accountant, PricewaterhouseCoopers (PwC), providing us with limited assurance.

In the 2015 reporting year, 20 participants submitted data to the EMMS programme: An Post (Ireland), Australian Postal Corporation (Australia), bpost (Belgium), Correos (Spain), CTT Correios de Portugal (Portugal), Deutsche Post DHL Group (Germany), Empresa Brasileira de Correios e Telégrafos (Brazil), Le Groupe La Poste (France), New Zealand Post Ltd. (New Zealand), Austrian Post (Austria), POST Luxembourg (Luxembourg), Poste Italiane (Italy), Posten Norge (Norway), Posti (Finland), PostNord (Denmark & Sweden), PostNL (The Netherlands), Royal Mail Group Plc (United Kingdom), South African Post Office (South Africa), Swiss Post (Switzerland), United States Postal Service (United States). Please see Annex 2 "Exclusions and Estimations" for more information on the EMMS programme participants.

In order to accurately track the EMMS group's progress towards the programme's carbon emissions targets, the aggregated Carbon Performance Indicator (CPI) results presented for all years (unless otherwise stated) include only the results of participants that submitted data in the 2015 reporting year. Figures from posts that did not report data for this year have therefore been excluded, including data for previous years (back to and including the baseline year), so that a direct comparison can be made (for participants' reporting details, please see Annex 2 "Exclusions and Estimations"). In the Carbon Management Proficiency (CMP) analysis, we distinguish between the group of 18 participants within the EMMS group that joined the programme prior to 2010, and the wider group of 20 participants which also includes posts that joined the EMMS programme two or more years after it began. These scores are distinguished between for all years back to and including 2010 due to the scores for newer participants typically being relatively low in their first few years of reporting. We do, however, recognise that the rate of improvement of the newer participants is commensurate with the rate of improvement of the EMMS group as a whole. We are confident that new participants will continue to improve their scores from their individual baselines through participation in the EMMS programme.

# 1.1

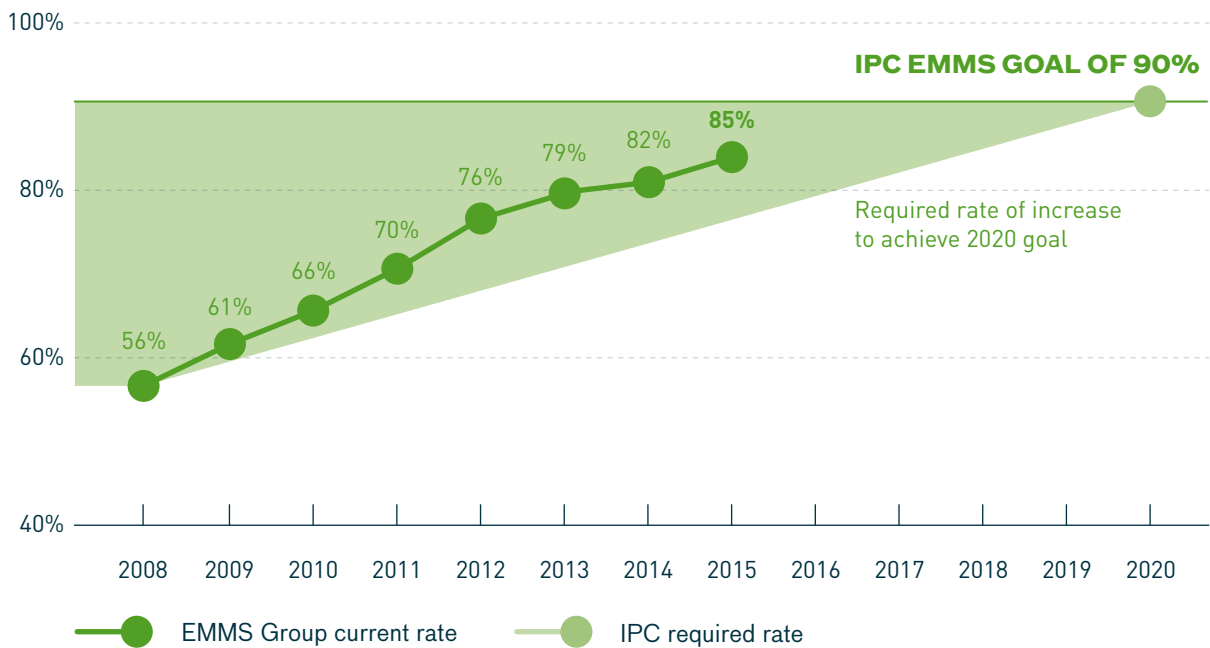
## 2008 – 2015 RESULTS: SURPASSING EXPECTATIONS IN OUR PROGRESS TOWARDS OUR TARGETS

### CARBON MANAGEMENT

As a result of year-on-year improvements in the EMMS group’s score, on its current trajectory the group is on track to achieve the 90% CMP target before 2020. In 2015, EMMS participants achieved an average of 85% (2014: 82%). This represents an increase of 29 percentage points since 2008, equating to an annual average increase of 4.1 percentage points. While we recognise that achieving further improvements becomes even more challenging as participants attain higher scores, with only a further 5 percentage points required to reach the target we are optimistic that the group can achieve this goal in the next five years. For detailed results, see the Technical Analysis section.

In addition to the collective achievements of the group, several posts stand out at the individual level. Indeed, the 90% target has already been surpassed by six posts, while a further 11 posts achieved overall scores of at least 75%. Moreover, our highest scoring participant scored 100% in five of the ten management pillars. While we do not publish individual results, all participants report on carbon management and emissions in the public domain. Furthermore, within the Case Studies section of this publication we provide best practice examples of carbon management initiatives underway at individual posts.

Figure 1: 2008-2015 Overall Carbon Management Proficiency results





## DELIVERY EFFICIENCY

Having achieved the 2020 reduction target for total volumes of carbon emissions in 2014, last year a new target was introduced for the group; to achieve a 20% reduction in Scope 1, 2, and 3 (where Scope 3 includes outsourced transport only) emissions per letter mail and per parcel by 2025, from a 2013 baseline. The group's letter mail delivery efficiency has effectively remained stable since the 2013 baseline, with the group reporting 37.2 grams of CO<sub>2</sub> per item in 2015 compared to 36.9 grams per item in 2013. Meanwhile, parcel delivery efficiency saw significant improvement again this year, with the group reporting 439.9 grams of CO<sub>2</sub> per item compared to 468.7 grams per item in 2014, a further decrease from 505.0 grams per item in 2013. This represents a 13% decrease in emissions per parcel in just two years.

**Table 1: Letter mail and parcel delivery efficiency 2013 - 2015**

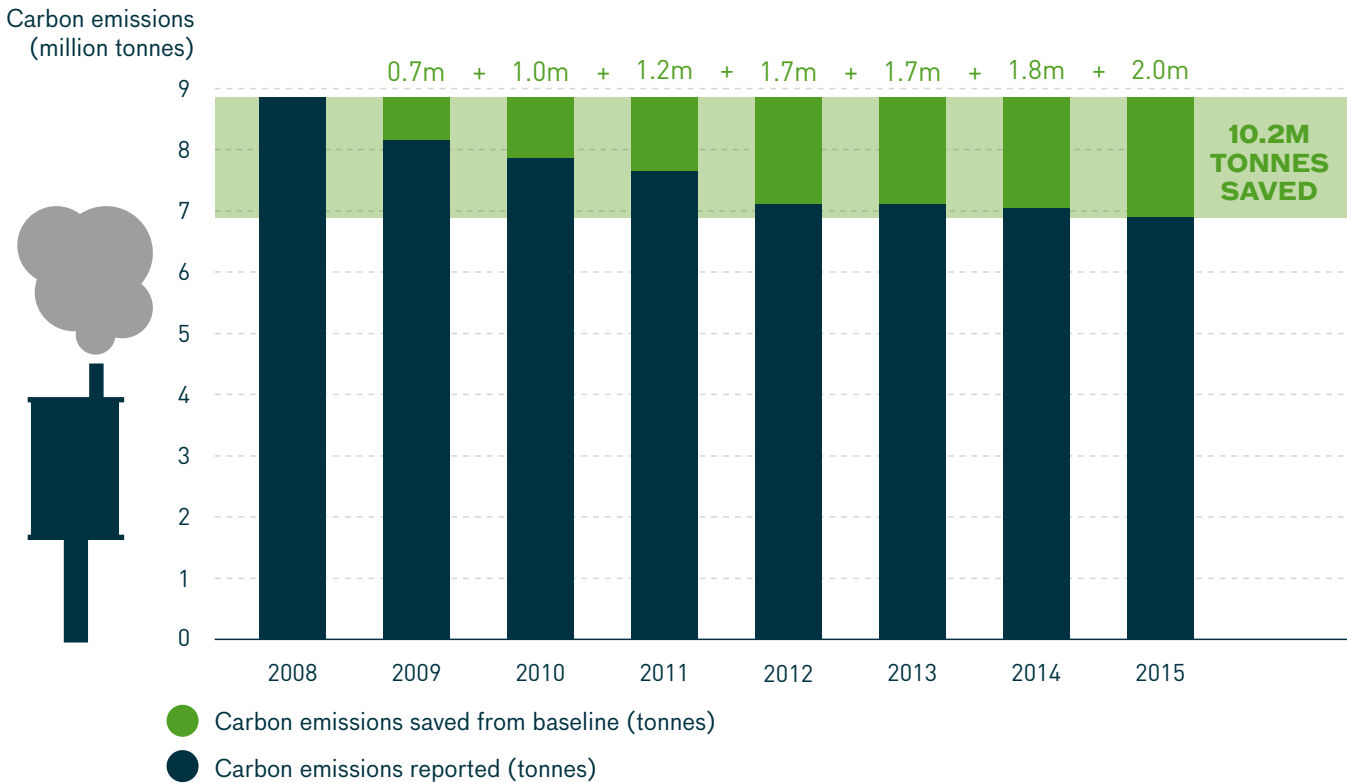
Delivery Efficiency	2013	2014	2015	2025 Target
<b>Letter mail</b> (grams CO <sub>2</sub> per item)	36.9	37.2	37.2	<b>29.5</b>
<b>Parcel</b> (grams CO <sub>2</sub> per item)	505.0	468.7	439.9	<b>404.0</b>

Although letter mail efficiency remained relatively stable between 2014 and 2015, the group achieved a greater reduction in absolute emissions associated with letter mail delivery than between 2013 and 2014. However, the decrease in letter mail volumes between 2014 and 2015 was also greater than the previous year. This continuing decline in letter mail volumes presents a growing challenge for participants in improving letter mail delivery efficiency. Meanwhile, while the group's emissions associated with parcel delivery increased between 2014 and 2015, the number of parcels delivered increased at a greater rate, illustrating the growth of e-commerce and the associated rapid increase in parcel volumes currently being experienced by the sector.

## CARBON EMISSIONS

Following the group's success last year in reaching the 20% absolute Scope 1 and 2 emissions reduction target - six years ahead of schedule - participants have continued their efforts to improve their carbon management and drive further emissions reductions this year. The group's emissions have decreased by 22.4% since the start of the programme, from 8,830,000 tonnes in 2008 to 6,852,000 tonnes in 2015 (see Figure 2). By aggregating savings since 2008, this equates to more than 10m tonnes of carbon emissions that have been avoided over the seven-year period.

**Figure 2: Carbon emissions reported and accumulated savings compared with the baseline**



Group emissions decreased by 148,000 tonnes, or 2.1%, between 2014 and 2015. This was driven by a decrease in Scope 1 emissions produced from buildings of 6% (46,000 tonnes), with Scope 2 electricity purchased also decreasing by 9%. Assessing the achievements of individual participants, 15 posts met the 20% reduction target in the 2015 reporting year. Please see the Technical Analysis section for a more detailed examination of results.

## BUSINESS CASE

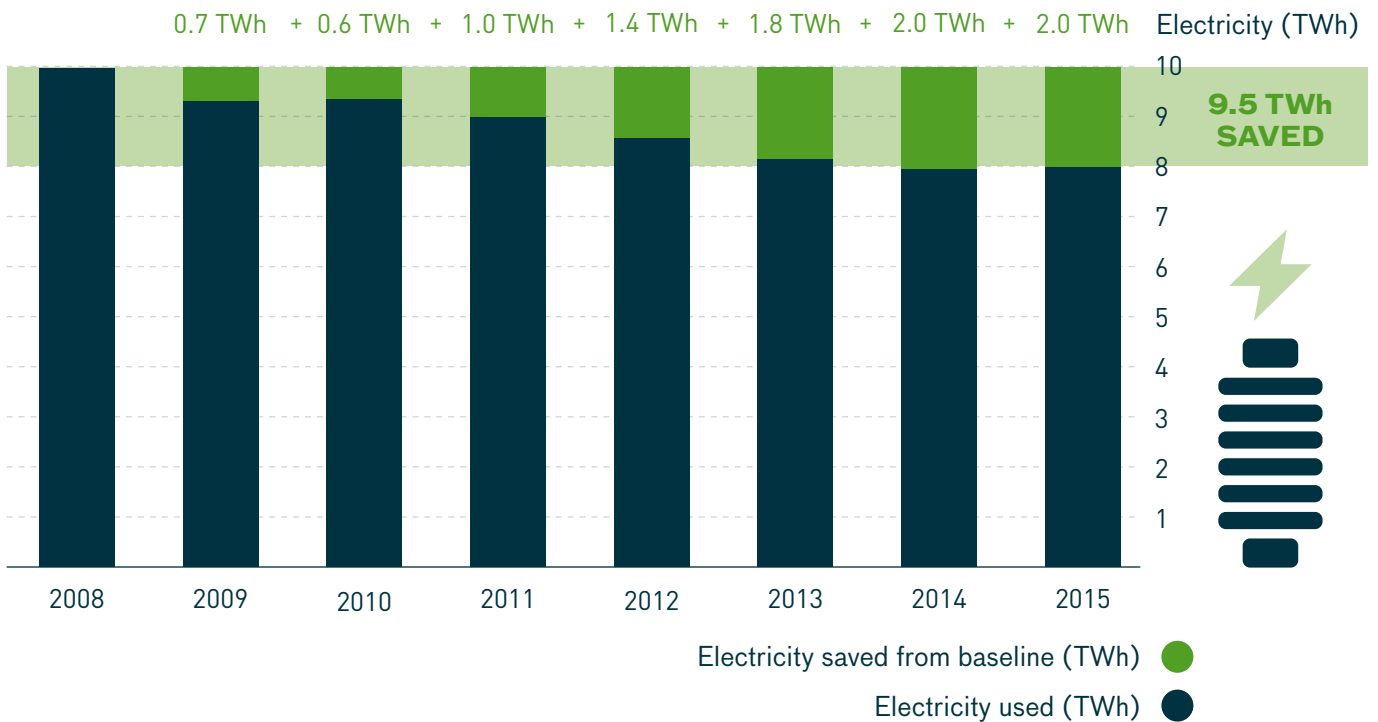
### FUEL CONSUMPTION

Fuel consumption and electricity use are the most significant contributors to the group's carbon emissions, and their reduction presents opportunities for participants to realise considerable financial gains. Indeed, in terms of own transport emissions, when compared to figures if emissions had remained constant the group has achieved an accumulated saving of 1.2 million tonnes of CO<sub>2</sub> over the seven years of the programme. Using a conservative conversion factor for diesel, this equates to 446m litres of fuel saved over this time period. This represents a financial saving of €390m (US\$432m).<sup>1,2</sup>

### ELECTRICITY CONSUMPTION

The group has achieved a significant reduction in electricity consumption since the start of the programme. Consumption has decreased from 9.95 TWh in 2008 to 7.96 TWh in 2015, which translates into an accumulated saving of 9.5 TWh over seven years. Using a conservative factor for the cost of electricity this corresponds to a saving of €889m (US\$985m).<sup>3</sup>

**Figure 3: Electricity consumption and accumulated savings compared with the baseline**

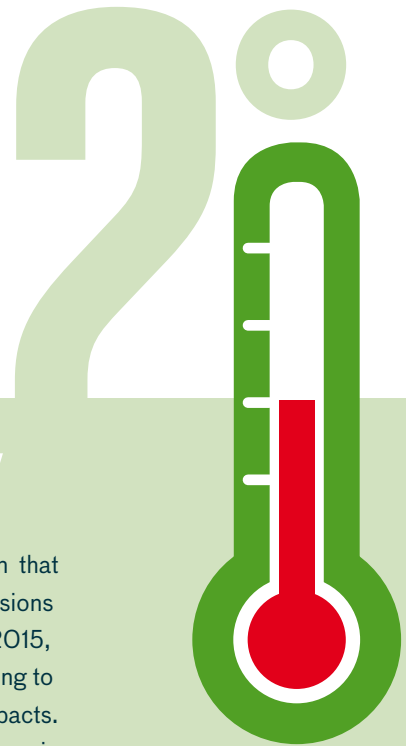


1. The World Bank conversion factor of US\$0.97 per litre (<http://data.worldbank.org/indicator/EP.PMP.DESL.CD>)  
 2. OECD currency conversion of US dollars to Euros (<https://data.oecd.org/conversion/exchange-rates.htm>)  
 3. US Energy Information Administration (EIA), Electric Power Monthly, Average Price of Electricity to Ultimate Customers: Total by End-Use Sector ([http://www.eia.gov/electricity/monthly/epm\\_table\\_grapher.cfm?t=epmt\\_5\\_03](http://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_5_03))

## THE ROAD AHEAD FOR EMMS

### KEEPING THE WORLD ON A 2°C PATHWAY

Following the Paris Climate Agreement there is growing recognition that global businesses will need to play a key role in reducing carbon emissions and enhancing climate action. Adopted by 195 countries in December 2015, the Paris Agreement sets out a global action plan to limit global warming to well below 2°C in order to avoid the most dangerous climate change impacts. Through the EMMS programme, the postal sector is committed to increasing carbon efficiency and achieving relative carbon reductions across all aspects of the supply chain, by integrating climate change and energy considerations into operational policy, strategy, and long term planning.



Last year, the EMMS group successfully achieved the programme's 20% absolute emissions reduction target - six years ahead of the 2020 target date. In doing so the group has demonstrated the importance of collaboration in reaching emissions reduction targets. Similarly, collaboration within and across sectors will be essential in achieving the goals set out in the Paris Climate Agreement. To facilitate collaboration between EMMS participants, IPC annually hosts a Sustainability Workshop during which posts are invited to share information and best practices regarding their carbon management and emissions reduction efforts. This year's discussions were focussed on the current EMMS programme and progress to date, in addition to the programme's future direction and horizon scanning in line with global sustainability outlooks. Guest speakers from international organisations were also invited to share their knowledge and experiences and to encourage wider inter-organisational collaboration to address sustainability challenges.

In order to further develop the EMMS programme and to ensure that the postal sector is aligned with global climate objectives, a new delivery efficiency target was introduced for the group in last year's Sustainability Report. The EMMS participants aim to achieve a 20% reduction in Scope 1, 2, and 3 (outsourced transport) emissions per letter mail and per parcel by 2025, from a 2013 baseline. Further demonstrating our commitment to global climate action, in January 2016 this target was successfully approved as a sectoral benchmark by the Steering Committee of the Science Based Targets (SBT) initiative, a partnership between CDP, the UN Global Compact (UNGC), the World Resources Institute (WRI), and WWF intended to increase corporate ambition on climate action. This ensures that our target aligns with latest climate science, and that our emissions reductions are in line with the reductions that are required to limit global warming to 2°C. IPC's delivery efficiency target is therefore in accordance with the aims of the Paris Climate Agreement and associated Nationally Determined Contributions (NDCs) (please see Annex 4 for details of the NDCs of member states to the Paris Agreement). We encourage EMMS participants to submit their individual targets to the SBT initiative for official quality check.

Indeed, posts are already showing enthusiasm for setting ambitious targets in line with climate science. PostNord is the first of our participants to have individually developed a science based target, and we expect the representation of postal companies within the impressive group of organisations that have successfully developed science based targets to continue to grow.

The EMMS programme's delivery efficiency target places greater emphasis on carbon efficiency and broadens the programme's scope to include emissions from outsourced transport, which is a significant contributor to emissions from the postal sector. The current trend of decreasing letter mail volumes in tandem with increasing parcel volumes, which is largely attributed to the expansion of e-commerce, presents the EMMS group with a greater challenge in achieving efficiency improvements. Parcels have a higher carbon footprint than letter mail, while the rise in parcel deliveries is also leading to an increase in the use of outsourced transport. With this in mind, and as part of the collaborative drive to reduce the postal sector's carbon footprint, the EMMS participants have shown enthusiasm in their ambition to achieve greater transparency and more complete reporting of emissions associated with postal delivery. At last year's annual Sustainability Workshop participants established a Working Group on the exchange of Scope 3 emissions of cross-border mail. Subsequently, during the annual Sustainability Workshop in June 2016 the Working Group presented their approach to facilitate more accurate reporting of emissions associated with the delivery of international mail to the wider group. Participants continue to further collaborate in order to develop a methodology which can be adopted by all postal operators.

Collaboration and partnerships, between and within public and private sectors, will be imperative to implementing strong climate action. IPC is committed to further intensifying its collaboration with international organisations, and entering into new collaborative relationships in order to strengthen the EMMS programme's position as a leading sustainability initiative. Our current participation in successful collaborative initiatives includes the UNFCCC's Climate Neutral Now, WWF's Climate Savers, Science Based Targets, and the UN's Caring for Climate. IPC is also an active participant of the UN Global Compact, and the EMMS programme and its achievements comprise an important component of IPC's annual reporting to the UNGC.

## ADVANCING SUSTAINABILITY AND DRIVING POSITIVE CHANGE

While recognising the EMMS group's commendable achievement in reducing the postal sector's carbon footprint, IPC believes that the group is capable of improving sustainability not only in terms of emissions reductions, but also by expanding our sphere of influence to encompass wider sustainability issues. Building on the Millennium Development Goals, in 2015 the United Nations introduced 17 Sustainable Development Goals (SDGs) which provide a global agenda for sustainability action. The goals encompass a wide spectrum of sustainability issues from eliminating poverty, to ensuring sustainable water use, to taking action to mitigate climate change and its impacts. It is universally recognised that businesses must show leadership in implementing these goals, ensuring their integration into long term growth and strategy in order to advance sustainable development. The UN's SDGs thus make an explicit call for businesses to emerge as frontrunners in stepping up to the sustainability challenge.



Today is about action by all sectors of society. It is about innovation and imagination; collaboration and partnership.

Ban Ki-Moon,  
Closing Address at COP21 Action Day

Mapping relevant SDGs against the postal value chain enables priority areas for sustainability actions to be identified (see diagram). In doing so, postal companies can understand how their core activities impact different SDGs, and by specifically focussing on issues which are most material to the postal sector, they can influence the most positive change. The next stage of the process towards integrating the SDGs into the postal sector value chain will be to communicate and engage with our stakeholders on these aspects, thereby raising awareness of the importance of private sector involvement in achieving these goals. Stakeholder dialogue is of utmost importance to overcome sustainability challenges. We will reach out to our stakeholders to identify which sustainability aspects they consider to be most important to our sector, and therefore on which we should be focussing. Through communication, engagement, and collaboration, as a sector we will be fully equipped to build these sustainability aspects into long term development strategy.

## POSTAL SECTOR COMMITMENT: ALIGNING THE POSTAL SECTOR VALUE CHAIN WITH THE SDGS AND A CIRCULAR ECONOMY

In line with our goal to implement wider sustainability issues into our sectoral strategy, IPC intends to place greater emphasis on sustainable resource use within the EMMS programme. In doing so, we strive to further align with the Circular Economy concept, which aims to optimise the use of products and reduce waste through increasing recycling and reuse. Participants have already shown leadership in this respect. For example, Posti's focus on waste management under the WWF Green Office programme drove the company to raise recycling levels above 90% in 2014. Another example is New Zealand Post, whose waste reduction efforts between 2012 and 2015 enabled the post to increase its recycling rate to 77%, reducing waste to landfill by 36%. Meanwhile, by integrating sustainability into procurement decisions and engaging with suppliers, postal operators can encourage sustainable and efficient resource use in the postal value chain. This move away from the current, unsustainable linear business practices of production and consumption, towards a more circular system, will not only yield environmental and social benefits, but generate significant financial savings and increased competitiveness.<sup>4</sup> As emphasised by the UN, in order to achieve these sustainability challenges, businesses must ensure that sustainability information is integrated into their reporting. Indeed, IPC recognises that only by reporting on these aspects can we accurately monitor our progress towards achieving our sustainable resource management objectives.

4. Ellen MacArthur Foundation, February 2016, 'Intelligent Assets: Unlocking the circular economy potential'. Available at <https://www.ellenmacarthurfoundation.org/publications/intelligent-assets>



## GOAL

# 12

### ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

Postal sector to engage with suppliers to promote sustainable and efficient use of natural resources. Postal operators should also aim to increase the use of reusable and recyclable products in order to reduce waste generation, aligning with the principles of Circular Economy.



RAW MATERIALS



PRODUCTION AND SUPPLY



INBOUND LOGISTICS  
Collection and transport - own and outsourced



BUSINESS OPERATIONS  
Buildings and facilities, e.g. sorting centres

## GOAL

# 11

### MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

Postal sector to implement initiatives to enhance sustainable transportation and improve road safety by engaging with its own employees and drivers and also subcontractors involved in outbound logistics, delivery, and distribution.

## GOAL

# 13

### TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

The EMMS programme represents the postal sector's overarching commitment to increase carbon efficiencies and achieve relative carbon reductions across all aspects of the supply chain, by integrating climate change and energy considerations into operational policy, strategy, and long term planning.

## GOAL

# 6

### ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

Postal sector to collaborate and engage with suppliers in order to reduce the amount of water consumed in the production of materials within the postal supply chain.

## GOAL

# 11

### MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

Postal sector to enhance sustainable transportation and improve road safety by engaging with employees and subcontractors involved in inbound logistics.

## GOAL

# 7

### ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

Postal sector to increase the purchase and generation of renewable energy, while also achieving significant energy efficiency improvements.

## GOAL

# 8

### PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

Postal sector to ensure a safe and secure working environment for all employees, and promote resource efficiency and environmental sustainability in line with economic productivity.

## GOAL

# 9

### BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALISATION AND FOSTER INNOVATION

Postal sector to ensure that its facilities are sustainable through increased efficiency of operations and processes and by ensuring sustainable use of resources.

# 2. POSTS' BEST PRACTICE CASES

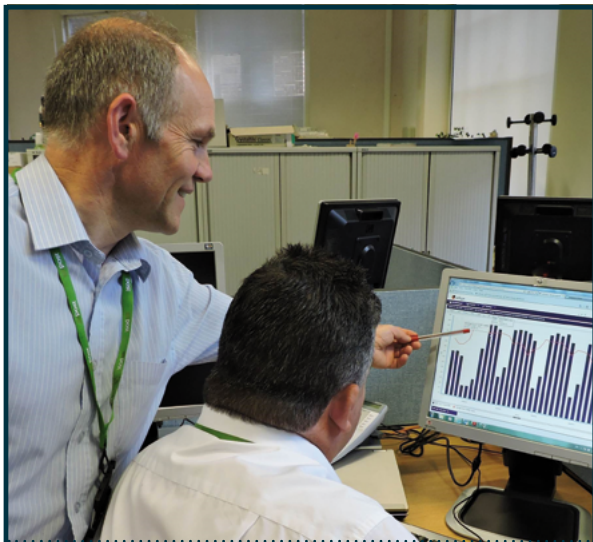




An Post . . . . .	18
Australia Post Corporation. . . . .	19
bpost . . . . .	20
Correos . . . . .	21
CTT Correios Portugal . . . . .	22
Deutsche Post DHL Group . . . . .	23
Le Groupe La Poste . . . . .	24
New Zealand Post. . . . .	25
Austrian Post . . . . .	26
POST Luxembourg. . . . .	27
Poste Italiane . . . . .	28
Posten Norge . . . . .	29
Posti. . . . .	30
PostNL. . . . .	31
PostNord . . . . .	32
South African Post Office . . . . .	33
Swiss Post . . . . .	34
United States Postal Service . . . . .	35



## ENERGY SAVING INITIATIVE ROLLED OUT ACROSS AN POST



AN POST'S ENERGY OFFICER PROVIDES GUIDANCE AND TRAINING TO MANAGERS WITH RESPONSIBILITY FOR BUILDINGS ENERGY USE AS AN ADDITIONAL SUPPORT TO THE ONLINE SYSTEM

An Post's Sustainability team has implemented an internet-based time clock which enables managers to control the heating in their buildings and reduce energy use. Using a combination of tailored analytics and feedback to An Post managers, the project aims to deliver reductions in energy usage through changes in energy-related behaviours, while also raising overall staff awareness about energy use in the workplace.

The time clocks allow managers to control and adjust the heating system from their computer, based on operational schedules - including 24/7 building use and times when the building is not in use, such as public holidays. Support and follow up monitoring is available from An Post's Energy Officer, who provides guidance to each manager on reducing energy spikes and who provides staff with information on home and building energy conservation.

In mid-2015, An Post installed the system in a further 25 buildings, which to date are yielding energy savings of between 25% and 35%. A further 65 internet-based timers were installed in early 2016 with a total of 90 remote systems installed across the building stock. Key factors in achieving these savings are securing the buy-in of managers using the system and the simplicity of the timer. This system has contributed to overall savings in An Post's energy usage of approximately 1,500 tonnes of CO<sub>2</sub> or 12,000 kWh since 2009.

## AUSTRALIA POST HELPS ORCHESTRATE RENEWABLE ENERGY PROJECT

Australia Post has partnered with thirteen major Melbourne-based institutions to launch the Melbourne Renewable Energy Project, a pioneering scheme designed to enable the purchase of large volumes of renewable energy through a group purchasing model. The scale of the project is not insignificant with the group aiming to purchase over 110GWh of energy.

The organisation's decision to enter into this consortium forms part of the postal service's wider ambition to reduce its carbon emissions by 25% by 2020 (based on 2000 levels). Participating in the Melbourne Renewable Energy Project will provide Australia Post with valuable experience in developing a renewable energy procurement model, as it continues on its carbon reduction journey.

In addition to signing up to the ground-breaking consortium, Australia Post is also trialling electric vehicles in its delivery fleet, upgrading its buildings to make them more energy efficient, and installing solar panels on many of the business' properties.

A tender process for the Melbourne Renewable Energy Project is currently underway. If successful, it is envisaged that the construction of the renewable energy plant will take place in the next two years. By providing enough power to supply 28,000 of the city's households, it is estimated that the project could reduce Melbourne's carbon emissions by 138,000 tonnes per year, which is the equivalent of planting more than 160,000 new trees.





## BELGIUM'S BPOST LEADS THE WAY ON SUSTAINABLE MOBILITY



A commitment to deliver eco-friendly products and services remains a critical part of bpost's environmental sustainability strategy. The Belgian postal operator boasts one of the country's largest delivery fleets, comprising 6,546 vans, 1,803 mopeds, 401 trucks, 2,923 bicycles, 2,541 electric bicycles and 12 electric three-wheelers. In 2015, this fleet accounted for almost 77% of bpost's direct carbon footprint.

As part of its efforts to minimise emissions, bpost has introduced a number of e-bikes into its delivery fleet, as it seeks to replace a significant proportion of the mopeds it currently has in operation. If current trials prove successful, the next stage in upgrading bpost's vehicle fleet will see the replacement of vans with electric three-wheelers.

bpost continues to provide eco-driving courses to its van drivers. In total, this saves thousands of litres of fuel annually. The postal

operator's Eco Driving Challenge began in 2011 with the goal of raising awareness among employees of their fuel consumption. Owing to the success of this scheme, it has remained in place to this day, with the winning team in 2014 qualifying for the IPC Drivers' Challenge, held in Finland in March 2015.

With a workforce of almost 30,000 people, bpost is also faced with a mobility challenge, particularly with regard to the daily commute. Therefore, a carpooling solution ([bpost.carpool.be](http://bpost.carpool.be)) was launched in 2015 to encourage co-workers to share their ride.



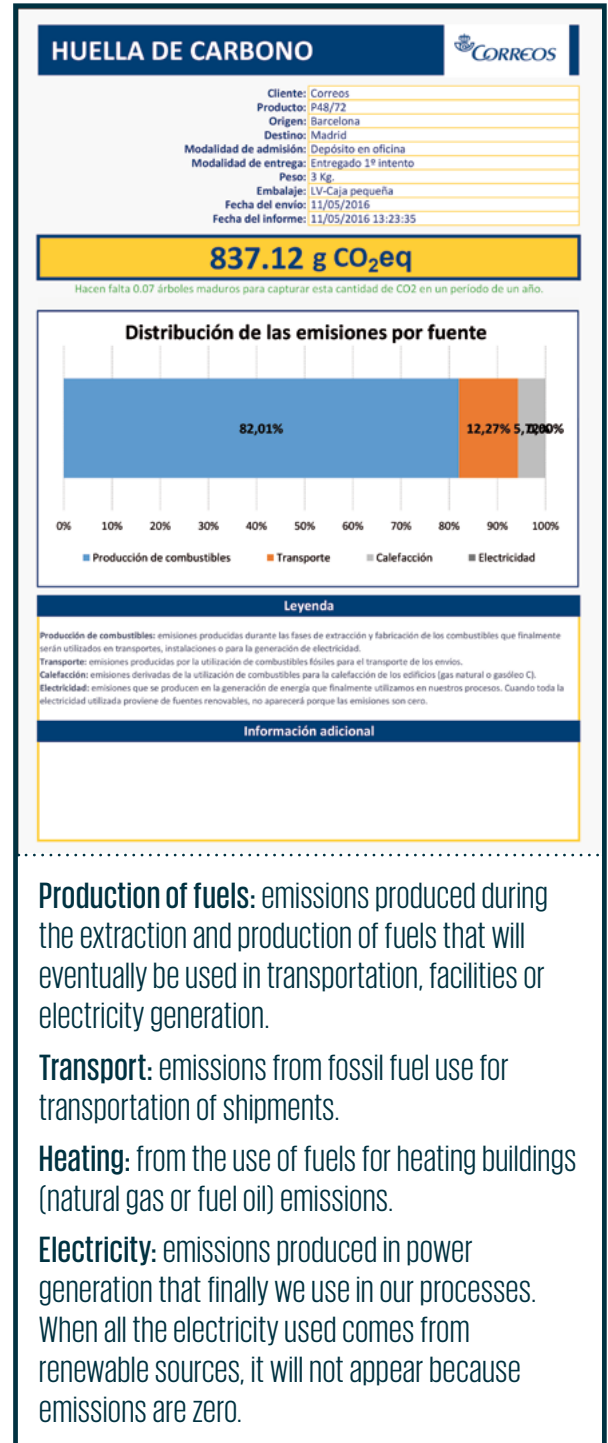
## CORREOS DEVELOPS AN ENVIRONMENTAL IMPACT CALCULATOR

As part of its wider 2014-2020 Efficiency and Sustainability Plan, Correos has developed an Environmental Impact Calculator to help its employees and customers better understand the environmental impacts of the Spanish postal operator's products and services.

Using a life-cycle analysis (LCA) approach, Correos measures the potential environmental impact of its packages and shipments by analysing the origin, destination, weight, type of packaging and methods of delivery. This analysis represents a key step in achieving Correos' longstanding goal of carbon neutral shipping.

In addition to implementing its innovative Environmental Impact Calculator, Correos is making further strides in reducing its carbon footprint on a number of other fronts. The postal operator is running more and more of its operations on renewable energy; it continues to introduce more electric vehicles into its delivery fleet; many postal rounds have been and continue to be 're-routed' to help cut unnecessary emissions; and a growing percentage of Correos' workforce are regularly taking part in 'green' awareness training initiatives.

Collectively, these measures have helped Correos take considerable strides in reducing its greenhouse gas emissions and meet its environmental performance targets for 2020.





## CTT CORREIOS DE PORTUGAL DRIVES DOWN ITS FUEL CONSUMPTION



IN ITS SECOND YEAR, THE MULTI-YEAR 'DRIVERS' CHALLENGE' INITIATIVE IS ALREADY DELIVERING STRONG RESULTS FROM AN ENVIRONMENTAL, HEALTH AND SAFETY PERSPECTIVE

In an effort to better safeguard the environment and also the wellbeing of its workforce, CTT Correios de Portugal has launched the 'Drivers' Challenge' initiative. The project aims to promote sustainable driving among its employees, by encouraging behavioural change through an incentives based approach.

Approximately 4,500 drivers from the postal operator's delivery and operations fleets are ranked according to data compiled on a daily basis in relation to fuel consumption, accident rates and levels of customer satisfaction. The 36 best scoring units send two representatives to participate in regional field trial competitions. Rewards for top-performing teams include entry into the IPC Drivers' Challenge.

Now in its second year, the multi-year 'Drivers' Challenge' initiative is already delivering strong results from an environmental, health and safety (EHS) perspective. The best performing teams achieved fuel consumption reductions of up 16%, corresponding to potential savings of €700,000 per annum. This improved fuel efficiency has the potential to lower CTT's CO<sub>2</sub> emissions by approximately 1,700 tonnes each year.

From a health and safety standpoint, driving accidents have previously resulted in 12,000 lost working days per year, with an estimated monetary cost of €1m per year. Thanks to the rollout of this scheme, CTT Correios de Portugal expects to see an annual reduction in accident rates by as much as 5%.

## INSTALLATION OF NEW LED LIGHTING HELPS TRIM DEUTSCHE POST DHL GROUP'S CARBON FOOTPRINT

Following a detailed review of the cost and commercial viability of LED lighting, Deutsche Post DHL Group is now committed to rolling out this technology across its offices, and industrial and retail buildings in Germany.

Following the maturation of LED lighting technology, Deutsche Post DHL Group started implementing this low carbon solution in its buildings in 2015. In that year the Group began installing LED lighting across its property portfolio, replacing existing lighting systems in operational areas with LED lighting controlled by sensors and timers.

Switching from filament to LED lighting will deliver an estimated energy saving of 80-90% when compared to traditional lighting and conventional bulbs. This lighting source is also 100% recyclable and contains no toxic materials, further reducing its environmental impact.

As part of this initiative, Deutsche Post DHL Group installed LED lighting at eight mail sorting centres across Germany in 2015, representing a combined area of 100,000 m<sup>2</sup>. Additional installation of LED lighting is set to continue throughout 2016, helping the Group accelerate its transition to a low carbon operating model.



LED LIGHTING AT THE SORTING  
CENTRE IN HANAU, GERMANY

## LE GROUPE LA POSTE MAKES THE TRANSITION TO RENEWABLE ENERGY



In 2014, Le Groupe La Poste's Corporate Social Responsibility (CSR) team laid the foundations of its ambitious environmental plan. Two main primary targets were set: to achieve a 15% decrease in the postal service's total GHG emissions by 2020, and also to successfully switch to a 100% renewable electricity supply over the same time period.

In October 2015, Le Groupe La Poste took the critical step of switching power to two thirds of the buildings operated by Poste Immo to renewable electricity. Since May 2016, 100% of the electricity purchased and used to power the offices, industrial and retail buildings managed by Poste Immo comes from renewable sources.

Switching to renewable electricity has delivered three major benefits to Le Group La Poste.

Firstly, the strategic decision to make the transition to renewable energy fully aligns the postal service's policy with that of both the French government and also the group's shareholder, Caisse des Dépôts et Consignations.

Secondly, it has now established Le Group La Poste as a respected 'green' industry leader. The postal service owns one of the world's largest electric vehicle fleets, which is now fully powered by renewable electricity.

Thirdly, from a financial standpoint, Le Groupe La Poste has successfully demonstrated that transitioning to renewable energy can deliver substantial cost savings. Le Groupe La Poste has committed to offsetting 100% of CO<sub>2</sub> emissions from mail, parcel and digital operations. By transitioning to renewable energy, CO<sub>2</sub> emissions have been considerably reduced, resulting in a decrease in offsetting costs.



## DELIVERING SUSTAINABILITY THROUGH SUPPLIER ENGAGEMENT

Following the successful culmination of its ambitious three-year resource efficiency programme in June 2015, New Zealand Post is now challenging itself to strengthen its supplier engagement processes to help deliver tangible environmental and societal improvements for all actors along the postal value chain.

As part of its sustainable procurement programme, New Zealand Post has introduced a new supplier code of conduct. The code establishes a minimum level of expectation for the group's suppliers, and extends to all suppliers and subcontractors. This initiative is enabling the group to track and monitor the sustainability performance of its supplier base, as well as helping to identify which business partners require further engagement on this issue.

In an effort to further enhance supplier dialogue, New Zealand Post has also committed to promoting best practices among its supplier base starting with a workshop on value chain management. The workshop was set up for a large group of key suppliers and was based upon a framework originally developed by the New Zealand Sustainable Business Council.

New Zealand Post plans to continue to assess its suppliers' commitment and performance on sustainability criteria over a multi-year period, while also identifying new topics and methods to engage with suppliers on. Following the success of this year's initial workshop, plans are already afoot to develop and deliver future content on topics such as environmental management systems and business ethics.



## AUSTRIAN POST LIGHTS THE WAY ON ENERGY EFFICIENCY MEASURES



As part of its long-term goal to reduce its carbon emissions, Austrian Post identified improving energy efficiency in its buildings as a key strategy. To achieve these energy use reductions, the postal operator has identified the upgrade of old lighting with LED systems, replacing existing boilers with more efficient models and improved building insulation.

Austrian Post's status as the country's largest logistics company was an important factor behind its decision to launch its 'CO<sub>2</sub> Neutral Delivery' programme. The scheme has three phases: firstly, avoiding emissions and increasing efficiency; secondly, identifying alternative sources of energy; and thirdly, compensation.

As part of the first phase, internal energy audits have proven to be highly effective in helping Austrian Post prioritise measures to reduce its energy consumption and lower its emissions. Since 2015, 14 energy efficiency measures have been implemented under the postal operator's CO<sub>2</sub> Neutral Delivery programme, which have yielded an estimated annual saving of approximately 1m kWh. In 2016, Austrian Post plans to launch an additional 10 to 15 measures to help the company further reduce its carbon footprint.



## POST LUXEMBOURG TRIMS ITS CARBON FOOTPRINT WHILE IMPROVING CUSTOMER SERVICE

In an effort to deliver on its commitment to reducing emissions, POST Luxembourg continues to add additional features to its PackUp service, which enables customers to choose when and where they wish to have their parcel delivered.

Launched in 2008 and now operating nationwide, PackUp has gone from strength to strength, currently offering a range of other complementary services, including: PackUp Points, PackUp 24/24 7/7, PackUp Import and PackUp Home.

PackUp Points enables customers to collect their parcels at more than 70 sites across the country, including not only at the organisation's post office branches, but also at local service stations and high street shops.

Meanwhile, PackUp 24/24 7/7 has developed into an established network of 40 pick-up stations, where customers can access their deliveries from a series of 4,000 safe storage compartments, 24 hours a day, seven days a week. On account of the success of this service, POST Luxembourg has set itself the ambitious target of increasing the number of nationwide pick-up stations to 70 by the end of 2016.

PackUp Import has further streamlined the postal service's delivery processes, enabling customers to have items ordered from neighbouring France and Germany promptly delivered to a local PackUp 24/24 7/7 station or a nearby PackUp Point.

The recently launched PackUp Home service provides customers with even greater flexibility, allowing them to have their parcels delivered to their homes, even if they are away.

Aside from improving the user experience of many of its customers, the PackUp service is contributing to reduce the carbon footprint of POST Luxembourg's operations.



## POSTE ITALIANE EMPLOYEES GEAR UP FOR ECO-DRIVING TECHNIQUES



ECO-DRIVING HAS THE POTENTIAL TO SIGNIFICANTLY REDUCE BOTH AIR POLLUTANTS AND GREENHOUSE GAS EMISSIONS

As part of its Mobility Management programme, Poste Italiane will in 2016 launch the Eco-Driving Pills project: an awareness raising initiative designed to encourage the postal operator's workforce to utilise more sustainable transport options and adopt eco-driving techniques.

Delivered via video, the training will be made available to all Poste Italiane personnel through the company's intranet portal. Participation in this programme will provide employees with a better awareness of environmental protection and sustainable mobility solutions in urban areas and the associated financial savings.

Based upon an internal analysis of employee commuting, eco-driving techniques may be applicable to 65% of Poste Italiane's workforce. This suggests that the initiative holds the potential to significantly reduce both air pollutants and greenhouse gas emissions.

The Italian postal operator estimates that educating its employees on eco-driving techniques can achieve reductions in fuel consumption by up to 15%, as well as trimming associated emissions of CO<sub>2</sub>, NO<sub>x</sub> and PM<sub>10</sub>.

Furthermore, research has demonstrated that greater awareness of eco-driving positively impacts on long term behaviour. Initial results from Poste Italiane's Eco-Driving Pills training programme indicate that fuel consumption and associated carbon emissions decreased by an average of 6% over 30 days.

## NORWAY POST RE-CHARGES ITS ELECTRIC VEHICLE ASPIRATIONS

As part of its ambitious target of replacing fossil fuel powered vehicles in its delivery fleet with zero emissions alternatives, Norway Post has assembled the largest fleet of electric vehicles currently operating inside Norway. It is comprised of 580 electric mopeds, 420 electric cars and 180 electric trolleys.

Underlining the scale of Norway Post's commitment to embracing the latest electrical vehicle technology, in June 2015 the group announced that it had made one of the world's largest single purchases of electric cars by ordering 241 new electric vehicles.

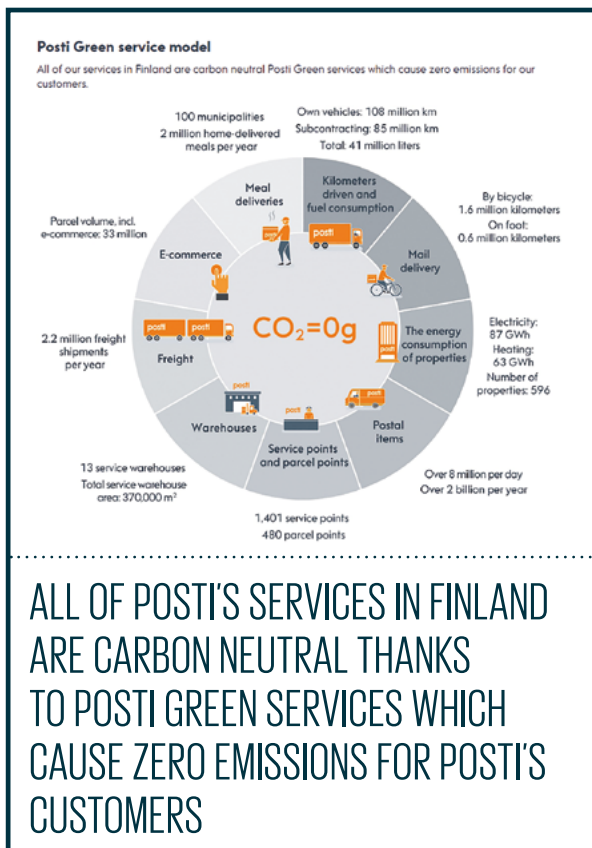
Norway Post's strategy to adopt zero emissions alternatives was originally conceived in 2008. Since then, the implementation of zero emissions mobility solutions has so far resulted in CO<sub>2</sub>-free mail distribution in more than 20 urban areas throughout Norway. This has led to improved air quality, reduced noise and fewer greenhouse gas emissions in major urban areas such as Ålesund, Bergen and Trondheim.

At the end of 2015, Norway Post had achieved its objective of zero emissions mail distribution in 21 towns and cities across the country. By the end of 2016, the group aims to extend this to a further 20 towns and cities.



NORWAY POST TAKES DELIVERY  
OF THE SINGLE BIGGEST ORDER OF  
ELECTRICAL VEHICLES IN NORWAY

## POSTI REMAINS AT THE FOREFRONT OF GREEN LOGISTICS



In 2011, Posti became the first postal company in the world to offer 100% carbon neutral delivery services. In 2015, the portfolio of Posti's successful carbon neutral 'Posti Green' concept was expanded to include all postal services, parcels, transport and freight services and warehousing services.

Posti Green is part of Posti's environmental programme, which aims to cut carbon emissions by 30% by 2020 (in relation to net sales, compared to 2007). Route optimisation, eco-driving, high utilisation rates and transport aggregation have been identified as mechanisms improving efficiency and reducing carbon emissions.

While the Posti Green initiative has helped reduce Posti's carbon footprint, remaining emissions are neutralised through the funding of certified climate projects. Through these mechanisms Posti has funded wind power projects in India and Turkey, for example. The renewable energy generated through these schemes not only reduces carbon emissions but also has a positive impact on local employment.

In 2016, Posti Green's emissions calculation processes and reporting were reviewed by a third party. Posti intends to provide customers with a certificate that Posti Green services have independent assurance.



## POSTNL ROLLS OUT SOLAR TECHNOLOGY ACROSS SORTING AND DELIVERY CENTRES

In an effort to keep pace with the rapid growth of e-commerce, PostNL continues to invest in sustainable solutions to 'future proof' its network of parcel sorting and delivery centres. As part of this process, the corporation has installed state-of-the-art energy efficient sorting machines, as well as structurally re-designing many of its depots to ensure optimum use of daylight and solar technology.

Despite already being a heavy consumer of 'green' electricity, PostNL is aiming in the near future to produce the majority of its required energy locally, as well as improving energy efficiencies in new and existing buildings.

The installation of solar panels at the first PostNL sorting office took place in June 2016. Before the end of the year, the corporation aims to have installed solar panels in a further 12 sorting centres, with the remaining seven other sites nationwide being fitted out with this cutting edge technology in 2017. When realised, it will be second largest industrial solar panel installation in the Netherlands.

PostNL's solar panels are expected to generate upwards of 4.8m kWh each year - approximately 40% of the electricity required to power the corporation's parcels division. Once fully operational, they are set to reduce the postal services carbon emissions by approximately 1,800 tonnes per annum.



THE FIRST OF 19 POSTNL SORTING CENTRES FULLY COVERED WITH MORE THAN 1100 SOLAR PANELS (DEN HOORN, CLOSE TO THE HAGUE - MAY 2016)

## POSTNORD LEADS FROM THE FRONT ON SUSTAINABLE BUSINESS



ELECTRIFICATION OF TRANSPORT  
IS AN IMPORTANT COMPONENT IN  
ACHIEVING POSTNORD'S TARGETS

At the forefront of PostNord's sustainability strategy is its commitment to reducing scope 1, 2, and 3 absolute emissions by 40%, between 2009 and 2020. To achieve this, the company has identified six priority areas in which to act: better utilising vehicle capacity; increasing fuel efficiency; investing in electric vehicles (one third of the organisation's fleet is now electric); using more biofuels; increasing the use of trains and reducing air freight; and making its buildings more energy efficient.

Realising these aims requires investment, so PostNord has established a dedicated Environmental Fund, which employees can access to fund projects that are designed to help cut emissions. With over half of PostNord's carbon emissions generated by subcontractors (i.e. scope 3), the postal operator has committed to working with them to ensure they too deliver their share of reductions.

Of the 100+ projects that have already been implemented, PostNord has already yielded a greater and more rapid return on investment than expected. Furthermore, the group's target of a 25% increase in energy efficiency would lead to a reduction in its annual energy bill of US\$2bn.

PostNord aspires to meet society's expectations and its strategies and targets are moving the organisation closer towards that. Sustainability is a core part of the company's overall business strategy and is centrally integrated into its detailed organisational plan.

PostNord's 40% reduction target has been approved by the Steering Committee of the Science Based Targets initiative. The target is considered science based as it is in line with the decarbonisation required to keep global temperature increase below 2°C.

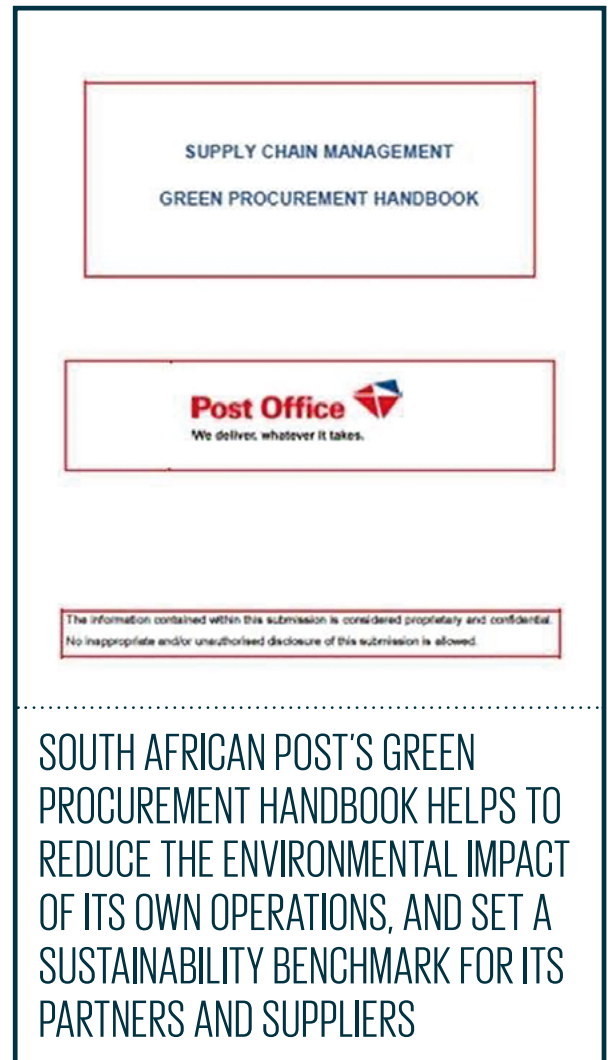


## SOUTH AFRICAN POST OFFICE BUILDS STAKEHOLDER AWARENESS AROUND SUSTAINABLE ISSUES

As part of its ongoing commitment to embed sustainability criteria within its procurement processes, the South African Post Office has issued stakeholders with a new handbook designed to promote and inform sustainable purchasing decisions.

The project has been initiated to help the organisation better identify products and services that cause minimal adverse environmental impacts. Through this endeavour, the South African Post Office aims to raise awareness about the benefits of procuring sustainably among its service providers.

With the development and roll-out of the green procurement handbook now complete, the organisation hopes that this will reduce the environmental impact of the postal service's own operations, while also setting a sustainability benchmark for its partners, suppliers, contractors and consultants to aspire to.



SOUTH AFRICAN POST'S GREEN PROCUREMENT HANDBOOK HELPS TO REDUCE THE ENVIRONMENTAL IMPACT OF ITS OWN OPERATIONS, AND SET A SUSTAINABILITY BENCHMARK FOR ITS PARTNERS AND SUPPLIERS

## SWISS POST ON TRACK TO MEET AMBITIOUS CLIMATE TARGETS



ACTING NOW FOR THE CUSTOMER OF TOMORROW

Underscoring its commitment to sustainability, Swiss Post set itself the ambitious target of reducing its carbon emissions by at least 10% by the end of 2016, based on a 2010 baseline. The postal operator intends to cut greenhouse gas emissions across all aspects of its operations, from the transportation of its deliveries, to the heating of its retail and industrial premises.

To achieve this goal, Swiss Post has rolled out a number of measures and initiatives, including switching to 100% renewable electricity from Switzerland since 2013. In addition, the group also operates ten solar power systems with a peak capacity of 5,560kW, feeding 8.7GWh of electricity into the grid.

The promotion of alternative vehicle technologies forms an equally critical component of Swiss Post's sustainability strategy. An increasing proportion of the postal service's delivery fleet is now powered by green electricity, biogas and biodiesel. In addition,

over 6,000 electric scooters are used by Swiss Post personnel on delivery rounds, while about 100 company vans deliver parcels using domestically produced biogas. In 2015 alone, the use of environmentally friendly B7 diesel achieved savings of more than 1,100 tonnes of CO<sub>2</sub>.

At Swiss Post's Eclépens, Härkingen and Zurich-Mulligen sorting centres, the postal operator has invested in updating the technology behind its 'lifting beams' - key machinery required to move letter crates in high-bay warehouses. The braking energy that they generate is now fed back as electrical energy into the grid, saving approximately 114 mWh per year, or roughly 15 tonnes of CO<sub>2</sub>.

Alongside the implementation of ongoing and planned measures, Swiss Post has already set the basis for the next strategy. Swiss Post will further align its climate strategy with the Intergovernmental Panel on Climate Change's recommended goal of limiting global warming to less than 2°C compared to pre-industrial levels.

## USPS EXPANDS ALTERNATIVE FUEL CONTRACT DELIVERY FLEET

The United States Postal Service (USPS) continues to work collaboratively with over 7,500 suppliers to expand the use of alternative fuels in its contract fleet. In 2014, 39 USPS contract trucks were operating with compressed natural gas (CNG), accounting for a total of 4.8m annual km (3m annual miles) and 1,976,000 annual litres (522,000 annual gallons) of fuel. By 2015, USPS had increased the number of its contract natural gas trucks from 39 to 72, more than doubling the number of annual km operated by natural gas vehicles from 4.8m km (3m miles) to 10.6m km (6.6m miles).

By December 2016, USPS estimates that it will have approximately 140 contracted trucks running on alternative fuel. The USPS is in the process of developing long term goals for this alternative fuel initiative. Additionally, USPS is continuing to engage with its supply base to further encourage and promote the use of alternative fuels in its contracted fleet.

It is estimated that USPS's contracted CNG fleet has now displaced over 4.5m litres (1.2m gallons) of diesel fuel and emitted at least 25% less emissions than the diesel trucks they replaced. CNG has proven itself to be advantageous in both fuel cost and service reliability, and continues to gain popularity amongst USPS vehicle contractors.



USPS'S CONTRACTED CNG FLEET  
EMITTED AT LEAST 25% LESS  
EMISSIONS THAN THE DIESEL TRUCKS  
THEY REPLACED

# 3. TECHNICAL ANALYSIS



Assessed in this chapter are the results and analysis of the two core areas of the EMMS programme: Carbon Management Proficiency (CMP) and Carbon Performance Indicators (CPI). The fundamental principle of the EMMS programme is that a comprehensive approach to carbon management is essential to achieving significant, systematic and sustainable year-on-year reductions in carbon emissions. Effective carbon management involves the implementation of appropriate business principles and systems, clear accountability at senior levels, effective employee engagement, and comprehensive and transparent public reporting.

The first stage of the EMMS annual reporting involves the completion of a comprehensive Carbon Management Proficiency (CMP) questionnaire. This qualitative assessment evaluates participants' performance against ten management pillars. The second stage, Carbon Performance Indicators (CPI), is a quantitative assessment of participants' carbon efficiency. This process requires participants to report on their carbon emissions and other organisational data, including renewable and non-renewable electricity consumption, transport modes and distances (own and outsourced), postal quantities, and numbers of alternative-fuel capable vehicles.

Since 2008, IPC has annually collected, analysed, and transparently reported on these results in the form of publically available Sustainability Reports. These reports illustrate the EMMS group's progress towards our three programme targets, as well as other important performance areas. We ensure our data is accurate and credible through a third-party review from our external accountant, PwC, providing us with limited assurance.

Each participant in the programme is also provided with an individual analysis of their own CMP and CPI results in the form of customised, high-level Scorecards and detailed Assessments which include recommendations for further improvement. A Briefing Deck is provided alongside these deliverables, which includes anonymised information about the performance of all of the programme's participants, enabling posts to benchmark their performance against the rest of the group. Each individual participant receives a rating based on progress made towards both improving their carbon management and reducing emissions.

## 3.1

# CARBON MANAGEMENT PROFICIENCY (CMP)

The CMP questionnaire considers the following ten management pillars:

1. Principles & Standards
2. Management & Strategy
3. Policy & Procedures
4. Employee Engagement
5. Activity
6. Measurement & Verification
7. Targets
8. Performance
9. Disclosure & Reporting
10. Value Chain Management

By responding to questions within each of the pillars participants can obtain a maximum of 100 points. During a plausibility review, responses are compared with those of the previous year in order to identify significant differences in participants' responses. This ensures that the questionnaire is completed consistently, and that evidence of substantial improvements is provided where necessary. Overall results are validated by our external auditor PwC, who also reviews the responses from a pre-selected sample of posts each year, along with their Carbon Performance Indicators.

In the CMP section, we distinguish between the results of the 18 participants within the EMMS group that joined the programme prior to 2010, and the wider group of 20 participants which also includes posts that joined the EMMS programme two or more years after it began.<sup>1</sup> This distinction, which is applied for all years back to and including 2010, is made because the scores for newer participants are typically relatively low in their first few years of reporting. However, we are happy to note that the rate of improvement of the newer participants is in line with the rate of improvement of the EMMS group as a whole. Through participation in the EMMS programme, we expect new participants to strive to achieve the shared goals of the EMMS programme and to improve their scores from their individual baselines.



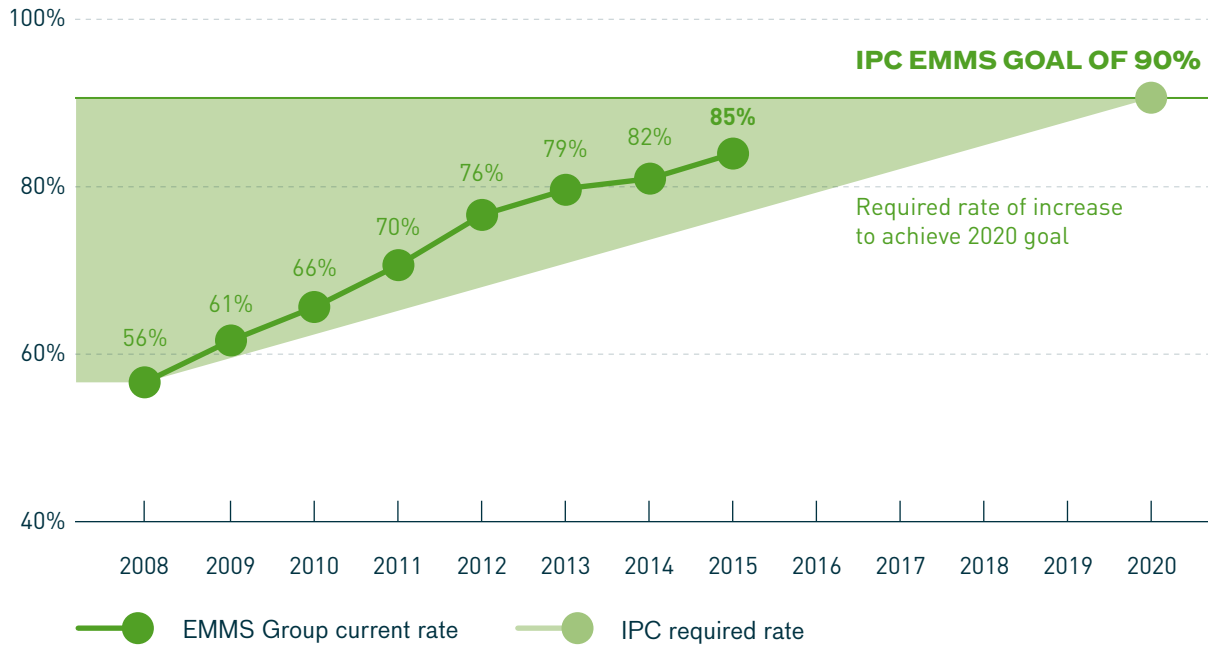
Through participation in the EMMS programme new participants strive to improve their scores from their individual baselines

1. In 2014 a total of 21 participants completed the questionnaire, including three participants that joined the EMMS programme two or more years after it began.

## KEY RESULTS

The EMMS group is on target to reach our goal of a 90% CMP score by 2020. In 2015, participants achieved an average CMP score of 85%, improving on 2014's score of 82%. This is a result of improvements reported by 15 (or 83%) of the 18 EMMS group members. Overall, the group has increased its score by 29 percentage points since 2008. Commendably, the EMMS group's annual average increase of 4.1 percentage points since 2008 is considerably higher than the 2.8-percentage point annual increase required to reach the 90% target. We are therefore confident that the group will achieve the 90% target ahead of schedule. If the two newest participants are also included, the group of 20 achieved an average CMP score of 83% (compared with 77% in 2014).

**Figure 4: 2008 - 2015 Overall Carbon Management Proficiency results**



## LEADING PARTICIPANTS ALREADY SURPASSING 2020 TARGET

Several individual posts can be identified as clear leaders in carbon management proficiency. In addition to the six posts that have already surpassed the 90% target, a further seven posts have obtained average scores of at least 80%. This year, our highest-scoring participant scored 100% in five of the ten management pillars, over 90% in four other pillars, and 80% in a further pillar. The EMMS programme is a collaborative venture, and as such IPC strongly encourages best-practice sharing in order for posts to assist others in improving their approach to carbon management. Best-practice examples can be found in the Case Studies section of this report.

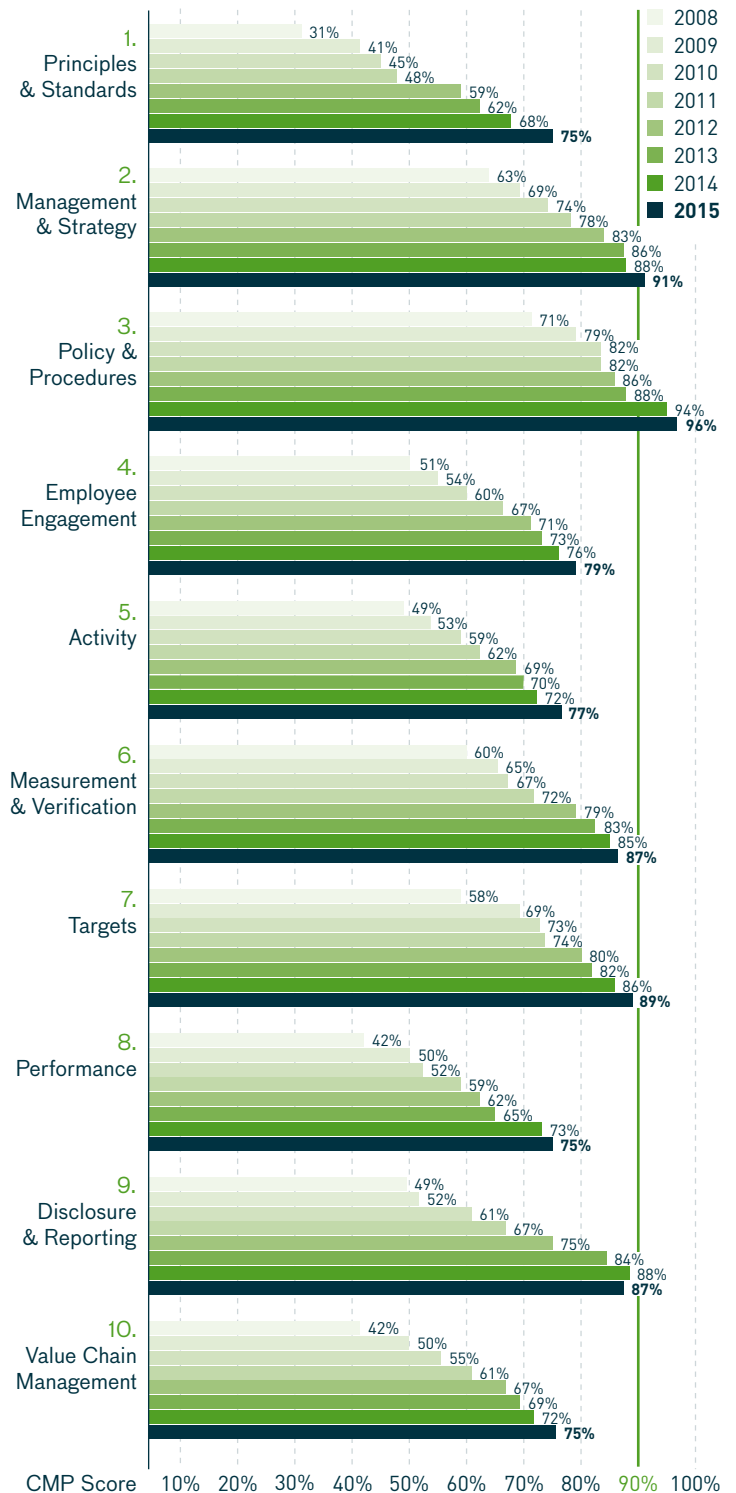
## RESULTS BY PILLAR

For the first time since the start of programme, the EMMS group scored over 70% in all ten carbon management pillars. In line with previous years, in 2015 the group performed best on issues relating to:

- Policy and Procedures (2015: 96%; 2014: 94%)
- Management and Strategy (2015: 91%; 2014: 88%)
- Targets (2015: 89%; 2014: 86%)

As in previous years, the group also performed well in the areas of Measurement and Verification (2015: 87%; 2014: 85%) and Disclosure and Reporting (2015: 87%; 2014: 88%). This marginal decrease in score for Disclosure and Reporting was driven by changes to the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines, with participants now encouraged to reference their reports under the new G4 Guidelines. Currently, 13 posts are referencing their reports in accordance with the GRI G4 Core option, and two in accordance with the Comprehensive option (which carries maximum points for the related question in the CMP Questionnaire). While we recognise the additional work required for companies to transition to GRI G4 Comprehensive reporting, we are confident that more participants will strive to achieve this in the coming years. Indeed, this topic was discussed in detail at this year's Sustainability Workshop, demonstrating participants' proactivity in this respect. In addition, while participants face a number of challenges in improving their scores in the Activity pillar (see "Improvement Opportunities" section for further information), this year the EMMS group achieved a five-percentage point increase (2015: 77%; 2014: 72%). This not only reflects the leadership demonstrated by participants and their substantial efforts in reducing their carbon emissions, but also the significant benefits of best practice and information sharing and the importance of the EMMS programme in facilitating this collaboration.

Figure 5: 2008 – 2015 CMP results by pillar



**Table 2: 2015 CMP Progress Highlights**

<b>Principles &amp; Standards</b>	<p>14 posts (78%) have endorsed the United Nations Global Compact (UNGC).</p> <p>13 participants (72%) submitted data to the Carbon Disclosure Project (CDP), while nine participants (50%) received a score of more than 85% for disclosure quality.</p>
<b>Management &amp; Strategy</b>	<p>16 participants (89%) have a developed, documented and communicated environmental management system.</p> <p>18 (100%) have defined responsibility at operational level and board / executive level.</p> <p>13 posts (72%) have estimated future emissions and carried out emissions scenario modelling for future energy options.</p>
<b>Policy &amp; Procedures</b>	<p>17 posts (94%) have made their carbon management policies publically available.</p>
<b>Employee Engagement</b>	<p>14 posts (78%) provide documented training to employees on the participant's carbon management policy.</p> <p>7 posts (39%) have linked carbon management objectives to at least 90% of managers' performance appraisals and performance-related pay schemes.</p>
<b>Activity</b>	<p>100% of participants are purchasing or generating at least some renewable electricity for buildings – 10 (56%) are purchasing / generating between 90% and 100%.</p> <p>12 posts diverted some amount of post from air travel in the last five years.</p>
<b>Measurement &amp; Verification</b>	<p>All participants publically report energy and emissions indicators, enhancing transparency in the sector.</p> <p>12 posts (67%) have indicators for CO<sub>2</sub> from the production of consumables in the supply chain.</p>
<b>Targets</b>	<p>17 posts (94%) have publically stated targets for the reduction of carbon emissions.</p> <p>Seven posts (39%) plan to be carbon neutral in the long term, of which four have set a defined date.</p>
<b>Performance</b>	<p>16 posts (89%) have achieved at least a 10% reduction in total company emissions per item since 2008. Of these, 7 have achieved at least a 25% reduction, 3 at least a 50% reduction, and one post is carbon neutral.</p>
<b>Disclosure &amp; Reporting</b>	<p>15 posts (83%) are referencing their reports in accordance with the new GRI G4 guidelines, of which two participants are reporting under the Comprehensive option.</p>
<b>Value Chain Management</b>	<p>In 2008, EMMS participants typically rated their value chain management programmes as 'under development.' In 2015, 61% (2014: 50%) of participants impose specific energy or carbon requirements for suppliers.</p> <p>11 posts (61%) have initiatives with both customers and suppliers to improve their carbon management.</p>



## IMPROVEMENT OPPORTUNITIES

As in previous years, the pillars which registered the lowest scores were:

- Principles and Standards (2015: 75%; 2014: 68%);
- Activity (2015: 77%; 2014: 72%);
- Performance (2015: 75%; 2014: 73%);
- Value Chain Management (2015: 75%; 2014: 72%).

Nonetheless, an average improvement of 34 percentage points across these pillars since 2008 demonstrates that participants are committed to ensuring continuous improvement in all of these areas. Illustrating participants' determination; between 2014 and 2015 participants achieved an increase of just under 7 percentage points for Principles and Standards, and a 5-percentage point increase for Activity. Participants also made progress in the Employee Engagement pillar this year, achieving a score of 79%, up from 76% in 2014.

Outlined below are some of the key areas for improvement within the lowest-scoring pillars, along with the challenges associated with achieving these improvements. At this year's annual Sustainability Workshop, several specific elements from the CMP were identified as focus points for discussion among participants. These areas included Activity and Value Chain Management. By inviting participants to share best practice and individual experiences, we hope to enable the EMMS group to further improve their carbon management and achieve relative emissions reductions.

### PRINCIPLES & STANDARDS

At 21 percentage points behind the highest-scoring pillar (Policy and Procedures), the Principles and Standards pillar presents many participants with opportunities to improve their performance. With a score of 75% this year, the EMMS group has more than doubled its score in this section from 31% in 2008, reflecting the additional consideration we have given this section since the start of the programme. Moreover, this year participants achieved just under a 7% increase in score compared to 2014 (68%). As a topic of focus at IPC's 2015 annual Sustainability Workshop, this highlights the benefits of the EMMS programme in facilitating information exchange, shared learning, and collaboration to support and encourage continuous improvement.

Nonetheless, there is still room for improvement, and we will continue our efforts to ensure further progress. In particular, as an active UN Global Compact (UNGC) participant, IPC will continue to encourage the remaining posts to become signatories. By committing to the UNGC's ten principles, which encompass human rights, labour, environment and anti-corruption issues, participants are provided with a strong framework to integrate into their business policies and practices. In 2015, 14 posts (78%) reported that they have endorsed the UNGC (16 when including the two newest members of the EMMS group), showing significant improvement from the six reported in 2008. In addition, with 13 posts currently reporting to the CDP, IPC will continue to support participants with their submissions.

## PERFORMANCE AND ACTIVITY

While participants have made steady improvement in both the Activity and Performance pillars since the start of the programme, many posts continue to face challenges in further improving their carbon efficiency and achieving associated emissions reductions. A significant difficulty facing posts is the current decreasing trend in the number of letters being delivered, in contrast to the steady increase in parcel delivery. Parcels have a higher carbon footprint than letter mail, and therefore this continual shift in the letter-to-parcel ratio makes achieving efficiency improvements more challenging. The EMMS group's new target (which is discussed in greater detail in the "Delivery Efficiency" section of the report) is specifically aimed at reducing the group's emissions per letter mail and per parcel item. Reporting against these indicators will provide greater transparency and enable participants to implement more focused improvement strategies.

Participants achieved carbon efficiency improvements at the start of the programme by implementing more straightforward emissions reduction initiatives, such as increasing the use of renewable electricity, optimising delivery routes, and implementing eco-driving. However, in the wake of the Paris Climate Agreement it is becoming ever more apparent that businesses need to invest in more extensive, long-term measures in order to achieve substantial emissions reductions from both transportation and buildings. For example, postal companies should look towards switching to 100% renewable electricity, further improving energy efficiency in buildings, and increasing their investment in alternative fuel vehicles. While environmental sustainability is the key objective in the implementation of these initiatives, proactive companies may also realise substantial financial returns on their investments. Indeed, as documented in the introduction to this report, the group has achieved a financial saving of €1,279m (US\$1,418m) through reduced fuel and electricity consumption since the start of the programme in 2008, based on conservative estimates.

EMMS participants have demonstrated steady progress in improving building energy efficiency. For example, in 2015 Deutsche Post DHL Group began replacing existing lighting systems in operational areas with LED lighting controlled by sensors and timers. LED lighting was installed at eight mail sorting centres in Germany in 2015, corresponding to a combined area of 100,000 m<sup>2</sup>, with additional installations continuing in 2016. Austrian Post is also increasing the energy efficiency of its buildings. As part of the company's CO<sub>2</sub> Neutral Delivery programme Austrian Post is upgrading old lighting with LED systems, replacing existing boilers with more efficient models, and improving building insulation. The company estimates that the 14 energy efficiency measures implemented under the programme since 2015 have resulted in an annual saving of approximately 1m kWh.

We also encourage posts to explore additional options in order to improve their carbon efficiency, such as through the introduction of initiatives to manage energy use in buildings. For example, An Post has introduced an internet-based time clock which allows managers to control the heating in their buildings, thereby enabling energy use reductions through raising employee awareness and encouraging energy-related behavioural changes. Buildings in which the system has been installed are reporting energy savings of between 25% and 35%, while the system has contributed to overall savings in An Post's energy usage of approximately 12,000 kWh, or 1,500 tonnes of CO<sub>2</sub>, since 2009.

Meanwhile, improvements are also being made with regard to renewable electricity, with 56% of participants reporting purchasing or generating between 90% and 100% renewable electricity for buildings in 2015. While there is still room for further improvement, it should be recognised that participants are making

progress in this respect. For example, Le Groupe La Poste has made strides in increasing its use of renewable electricity. Since May 2016, 100% of the electricity purchased to power buildings managed by its real estate operator, Poste Immo, comes from renewable sources. Meanwhile, Australia Post is increasing the company's use of renewable electricity by partnering with 13 major Melbourne-based institutions to launch the Melbourne Renewable Energy Project; a pioneering scheme through which the 13-member group aims to jointly purchase over 110 gWh of renewable energy.

Elsewhere, a number of participants have followed IPC's example and have adopted science-based carbon emissions reduction targets. For example, PostNord's commitment to reduce Scope 1, 2, and 3 absolute emissions by 40% between 2009 and 2020 has been successfully approved by the Science Based Targets initiative. In order to meet this target the company has identified six priority areas for action, and has also established a dedicated Environmental Fund to finance projects designed to help reduce emissions.

In terms of reducing emissions from transport, in line with our emphasis on the development and deployment of alternative-fuel and alternative-fuel capable vehicles, participants this year reported the use of 92,000 vehicles of this type (figure excludes self-propelled bicycles). Swiss Post continues to increase the proportion of alternative-fuel vehicles in the postal delivery fleet, utilising a variety of technologies, including renewable electricity, biogas, and biodiesel. Moreover, the company estimates that the use of environmentally friendly B7 diesel achieved savings of more than 1,100 tonnes of CO<sub>2</sub> in 2015 alone. We recognise that challenges remain in terms of implementing transport emissions reductions initiatives. For example, the economic viability of some developments may be restricted by a lack of national infrastructure, such as a lack of ports to charge electric vehicles. Meanwhile, posts may also be constrained by the nature of the routes that vehicles must travel. Furthermore, with the continuous rise in parcel volumes it is likely that there will be an increase in demand for larger delivery vehicles, often over greater distances, such that alternative fuel vehicles will not necessarily be suitable or available. However, there are options that may become available to overcome these challenges and enable posts to expand their use of alternative-fuel vehicles. For example, posts could look to collaborate with external organisations, such as manufacturers, governments, and other major transport users.

Diverting greater volumes of mail to less carbon intensive modes of transport and increasing transport efficiency are additional methods participants have pursued to reduce their carbon emissions. In particular, progress has been made by the group in reducing emissions from own air transport, which is of significance considering that air freight produces five times more carbon emissions than road freight. Within the EMMS group, 56% of participants reported reductions in the transportation of mail by air travel in the last five years in excess of 25% and/or had achieved a maximum possible reduction. Where transport via air is unavoidable, the group aims to use the full capacity of aeroplanes. In 2015 the EMMS group showed a commitment to more efficient use of air transport, reporting 11,000 dedicated flights compared to 2,439,000 shared passenger flights.

Carbon efficiency can also be improved through the development of low carbon products and services. For example, Correos has developed an Environmental Impact Calculator which aims to enable employees and customers to gain a better understanding of the environmental impacts of the company's products and services. By measuring the environmental impacts of packages and shipments throughout a product's lifecycle the impacts can be offset, thereby enabling Correos to achieve carbon neutral shipping. Meanwhile,

Post Luxembourg's PackUp service enables customers to choose where they would like to collect their postal items from, which has both improved customer service while also reducing emissions associated with employee and customer transport. It is also important for participants to recognise the importance of ensuring the sustainability of the whole life cycle of post, such as by promoting the recycling of used postal items, or by introducing initiatives to encourage the use of recycled paper in direct mail. In addition, postal operators should focus on ensuring sustainable production and consumption of other materials within the postal supply chain, such as mail bags, tie wraps, elastic bands, mail trays in sorting centres, and rolling containers.

## VALUE CHAIN MANAGEMENT

As the EMMS programme progresses to place greater emphasis on emissions reductions across Scopes 1, 2, and 3, engagement and collaboration with suppliers and subcontractors is becoming an essential component of emissions reduction strategies. Moreover, posts will need to ensure that appropriate standards and requirements regarding carbon management are in place and are effectively communicated and assessed. To date, 11 participants have specific energy or carbon standards or requirements of their suppliers, while nine posts actively favour suppliers and sub-contractors with lower carbon footprints or effective carbon management strategies. Recognising the importance of supplier engagement, New Zealand Post has introduced a new supplier code of conduct which establishes a minimum level of expectation for the group's suppliers. The code, which extends to all suppliers and subcontractors, enables the group to both monitor the sustainability performance of its suppliers and to identify supply chain partners requiring further engagement. New Zealand Post also plans to deliver annual workshops to further enhance dialogue and promote best practices among its suppliers. Meanwhile, South African Post Office has issued a green procurement handbook to stakeholders in order to encourage and inform sustainable purchasing decisions. This development will not only enable the company to identify products and services that have the least impact on the environment, but also sets an example in terms of sustainability performance for partners, suppliers, contractors, and consultants to aspire to.

Collaboration with transport subcontractors will be critical in reducing Scope 3 emissions. Indeed, road and air transport account for 40% and 33% of total Scope 3 emissions, respectively, and therefore will be a key source of emissions to address in order to meet the EMMS programme's efficiency targets. Recognising the importance of building collaborative relationships, USPS is working closely with over 7,500 suppliers in its efforts to expand alternative fuel vehicle use in the company's contract fleet. USPS's contract fleet of CNG vehicles increased to 72 trucks in 2015 (from 39 trucks in 2014), with the company expecting further expansion to approximately 140 contracted trucks by the end of 2016. USPS estimates that over 4.5m litres (1.2m gallons) of diesel fuel has been displaced by the contracted CNG fleet, while the fleet has emitted at least 25% less emissions than the diesel trucks that they replaced.

Engagement with suppliers of consumables within the supply chain, such as paper and packaging, to promote sustainability within the whole lifecycle of post is another essential element, and also aligns with the principles of a Circular Economy. In order to align with this concept, postal companies should aim to optimise the use of products and reduce waste through increasing recycling and reuse. Communication with suppliers in order to raise awareness of the importance of improving sustainability within all aspects of the postal value chain will be essential to achieving this goal. Not only will these efforts contribute to enhancing environmental prosperity, but participants will also benefit from substantial financial savings and increased competitiveness.

## 3.2 DELIVERY EFFICIENCY

### METHODOLOGY AND DEFINITIONS

The Carbon Performance Indicator (CPI) section of the EMMS enables IPC to assess quantitative elements of participants' carbon management, including carbon emissions and electricity use. The results presented in this report primarily focus on mail and parcel activities, excluding peripheral express and logistics services. We track emissions according to international greenhouse gas accounting standards, in particular the World Resources Institute Greenhouse Gas (GHG) Protocol. In line with this protocol, we refer to direct and indirect emissions using the following Scope 1, Scope 2 and Scope 3 terminology.

<b>Scope 1</b>	All direct GHG emissions from operations that are owned or controlled by the company, including those from buildings and transport
<b>Scope 2</b>	Indirect GHG emissions from the generation of purchased electricity, heat, steam, or cooling consumed by the company
<b>Scope 3</b>	Other indirect emissions from sources within the company's value chain, including transport-related activities by vehicles not owned or controlled by the reporting entity, business travel and employee commuting, outsourced activities, etc.

Since the boundaries of Scope 3 emissions are potentially very broad, IPC produces a guidance document outlining specific reporting procedures which is communicated to all participants. Building on the framework set out in the GHG Protocol Corporate Value Chain (Scope 3) Standard this provides a consistent set of parameters for industry-wide reporting of Scope 3 emissions. Our current focus is primarily on transport-related impacts. In response to participant feedback and analysis of past years' data, we continue to use a well-defined data collection coverage that encompasses the following four core categories, which collectively make up over 95% of total Scope 3 emissions:

- Outsourced or sub-contracted road transport
- Outsourced or sub-contracted air transport
- Employee commuting
- Business travel

The further 11 GHG Protocol categories, such as capital goods and use of sold goods, are excluded as they are currently considered immaterial to the postal sector.

In order for the EMMS participants to better understand the implications of their corporate activities on upstream and downstream carbon emissions, it is important to establish Scope 3 inventories. Data on emissions from the sources listed above are examined in this publication as part of our commitment to continuous improvement and in order to build a more comprehensive and accurate account of carbon emissions across the EMMS group.

Unfortunately, several posts are currently unable to collect data on employee commuting for privacy/legal reasons. As such, where considered appropriate, national averages have been used instead. As a result, in these instances company mitigation activities focused on employee commuting will not result in measurable

decreases in emissions from this source. As this is a significant source of Scope 3 emissions, we will continue to strive for more complete reporting of all participants.

Although IPC recognises sub-contractors as having primary responsibility for their carbon emissions, we know that EMMS participants can have a positive influence on this component of the value chain. Moreover, posts are encouraged not to reduce Scope 1 emissions at the expense of increasing Scope 3 emissions through outsourcing and sub-contraction. To this end, our new delivery efficiency target includes emissions from sub-contracted transport.

Over the duration of the programme there have been a number of changes to the composition of the group of participants. Five new participants have joined since 2009, two posts have merged to make one post, while four posts did not submit any data to the programme for the 2015 reporting year. In order to ensure that the programme remains dynamic and progressive, the aggregated results of the 20 participants that reported in the 2015 reporting year are presented (unless otherwise stated). Figures from posts that did not report data for this year have therefore been excluded, including data for previous years (back to and including the baseline year), so that a direct comparison can be made. We believe that this will enable us to more accurately track the reporting group's progress towards the EMMS targets. In order to achieve this we have used the earliest data reported by the new participants and assumed these figures to be stable for all previous years to estimate 2008 baseline figures. Please see Annex 2 "Exclusions and Estimations" for EMMS participants' reporting details.

## PROGRESS TOWARDS DELIVERY EFFICIENCY TARGETS

The postal sector is experiencing a continuous and rapid increase in parcel volumes, largely due to the rise in e-commerce, which is leading to a greater need for transport and therefore greater outsourcing. Recognising this trend, and following on from last year's achievement in reaching our 2020 reduction target for total volumes of carbon emissions, in 2014 a new delivery efficiency target was introduced for the EMMS group: to reduce CO<sub>2</sub> emissions (Scope 1, 2 and 3 – outsourced transport) per letter mail and per parcel by 20% by 2025, from a 2013 baseline. This target places greater emphasis on efficiency, and broadens the coverage of the programme's carbon reduction objectives to include Scope 3 emissions generated by sub-contracted and outsourced transport. Moreover, in January 2016, IPC's carbon efficiency target was successfully approved as a sectoral target by the Science Based Targets (SBT) initiative's Steering Committee. Our 20% efficiency target therefore ensures that our targeted emission reductions are in line with the reductions that are required to meet the Paris Agreement's goal of limiting global warming to 2°C.

The delivery efficiency target includes Scope 1, 2 and 3 (outsourced or sub-contracted road and air transport). It does not include Scope 3 emissions from business travel and employee commuting. IPC and EMMS participants agree that these sources represent substantial parts of the sector's carbon footprint, despite being unrelated to core business processes. However, after lengthy discussion it became clear that they needed to be excluded from the group target-setting, although figures will continue to be reported. One of the key reasons was that many posts in Europe cannot collect data on employee commuting for privacy reasons and therefore have to use national estimates, which jeopardises the robustness of the data. Emissions reduction efforts would therefore

not be reflected in figures. The feasibility of including business travel and employee commuting in a group target will be continually assessed. IPC also encourages posts to set individual company targets for these emissions, implement measures to achieve them, and share best practice.

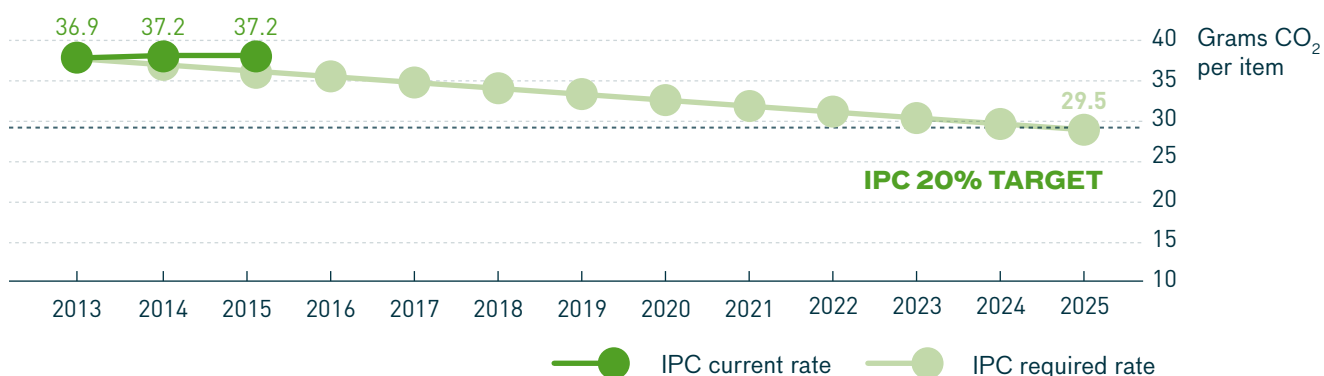
As shown in Table 3, the 20% target for delivery efficiency improvements correspond to carbon dioxide emissions of 29.5 grams per letter mail item and 404.0 grams per parcel item. This table also illustrates participants' progress towards the 20% targets to date.

**Table 3: Letter mail and parcel delivery efficiency 2013 - 2015**

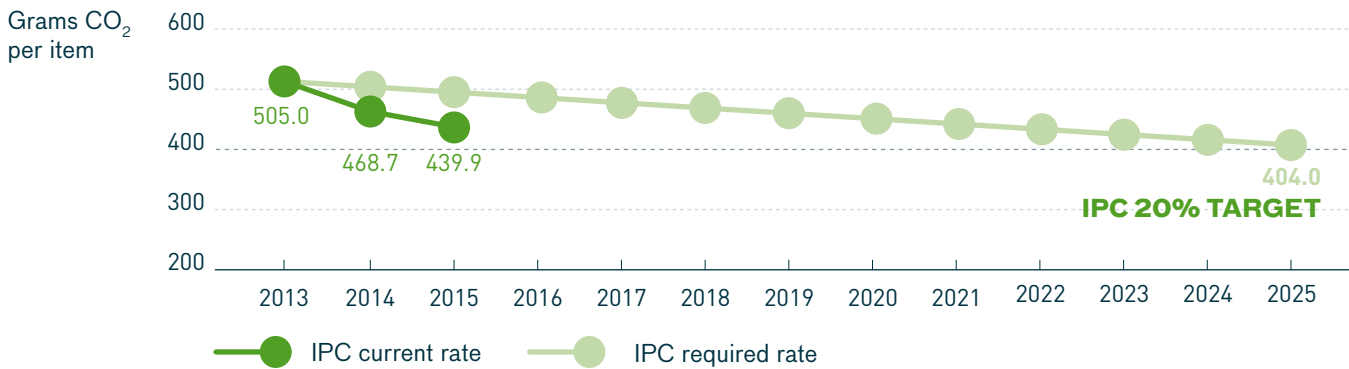
Delivery Efficiency	2013	2014	2015	2025 Target
<b>Letter mail</b> (grams CO <sub>2</sub> per item)	36.9	37.2	37.2	29.5
<b>Parcel</b> (grams CO <sub>2</sub> per item)	505.0	468.7	439.9	404.0

As shown in Figure 6, letter mail delivery efficiency effectively remained stable between 2014 and 2015, with the group reporting 37.2 grams of CO<sub>2</sub> per item in both years. The overall slight increase from the 2013 baseline of 36.9 grams per item reflects the growing challenge faced by participants in the continuous decline in letter mail volumes. Indeed, while the group achieved a greater decrease in carbon emissions between 2014 and 2015 than between 2013 and 2014, the decrease in letter mail volumes was also greater between 2014 and 2015 than the previous year. We do, however, see a significant improvement again this year in parcel delivery efficiency; 439.9 grams of CO<sub>2</sub> per item in 2015 compared with 468.7 grams per item in 2014, as shown in Figure 7. This represents a 13% decrease in emissions per parcel in just two years. In 2015 the group increased absolute emissions associated with parcel delivery, however, the number of parcels delivered increased at a greater rate; a clear demonstration of the expansion of e-commerce and the concurrent rapid increase in parcel volumes being experienced by the postal sector. For details of the methodologies used by participants to allocate their emissions to letter mail and to parcel categories see Annex 3 "Allocation methodologies for letter mail and parcel emissions".

**Figure 6: Letter mail; carbon emissions intensity pathway towards a 20% improvement in delivery efficiency (grams CO<sub>2</sub> per item)**



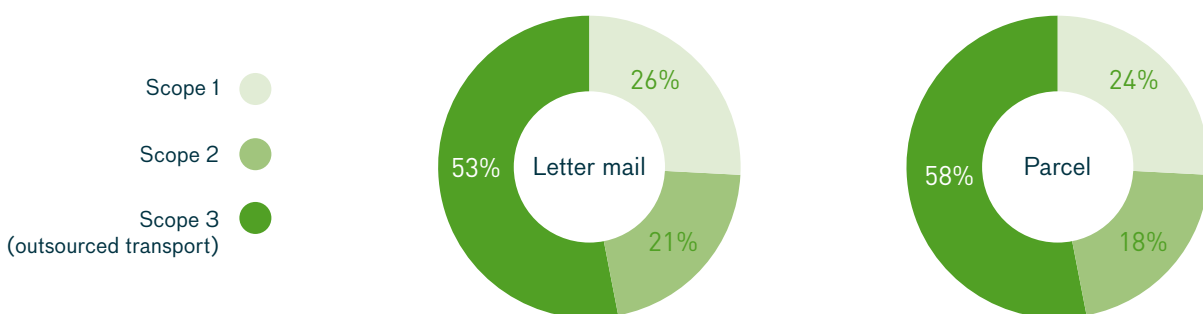
**Figure 7: Parcel; carbon emissions intensity pathway towards a 20% improvement in delivery efficiency (grams CO<sub>2</sub> per item)**



When analysing progress towards the delivery efficiency targets it is important that we recognise the constraints that some participants face in this new phase of the programme. National regulations under which our participants operate often include a Universal Service Obligation (USO) to make daily deliveries to every household by law. The ability of participants to improve the efficiency of their operations may therefore be impeded by such regulations. Further challenges to efficiency improvements stem from other politically driven positions, such as an obligation to retain post offices in each town or village, or having an imposed obligatory maximum distance between street post boxes. Moreover, business growth is inevitable. While we encourage participants to consider environmental sustainability within their business developments, we recognise that whereas companies may have implemented long term strategies with respect to carbon management, significant results may not always be apparent within the short term.

Nonetheless, it is clear that there are still considerable opportunities for posts to make progress in minimising their carbon footprint in a number of areas. As Figure 8 shows, outsourced transport represents the most significant proportion of emissions associated with letter mail and parcel delivery. IPC therefore continues to place an emphasis on participants increasing their communication and collaboration with transport service providers in order to drive down emissions from transportation. Furthermore, while participants are making considerable progress in increasing the proportion of electricity from renewable sources, the scope for further improvement in this area is significant.

**Figure 8: 2015 letter mail and parcel emissions by scope**





## EMISSIONS ANALYSIS: SCOPE 1

Within the EMMS programme participants report on Scope 1 emissions produced from buildings (including from electricity generation sources and heating) and transport (including road, rail, ship, and air). In 2015, emissions from buildings accounted for 19% of Scope 1 emissions, while emissions from transport accounted for 81%. In 2015, total Scope 1 emissions amounted to 3,944,000 tonnes – an increase of 118,000 tonnes (or 3%) compared with 2014 emissions. While emissions produced from buildings decreased by 6% (46,000 tonnes), emissions from road transport increased by 5% (153,000 tonnes), while air transport emissions increased by 7% (9,000 tonnes). This increase in emissions from transportation reflects the current trend of decreasing letter mail volumes in contrast to the rising number of parcels, which, due to their greater weight and volume, have a higher carbon footprint than letter mail. Meanwhile, the observed decrease in emissions from heating between 2014 and 2015 may be related, at least in part, to the more moderate winter conditions experienced in this reporting year in certain parts of the world where participants are located. With the implementation of our half-year scanning exercise, in addition to our continuing investigation into the application of degree days (see “Degree Days” section on the next page), we will continue to closely monitor the impact of climate variability on the group’s emissions.

Despite the increase observed between 2014 and 2015, Scope 1 emissions have decreased over the period during which the programme has been running. Indeed, total Scope 1 emissions have decreased by 415,000 tonnes (10%) since 2008. By comparing 2015 figures to the 2008 baseline, while we find that posts’ own transport emissions have increased by 5,000 tonnes (0.2%) over the course of the programme, emissions from heating have decreased by 451,000 tonnes (38%).

## EMISSIONS ANALYSIS: SCOPE 2

In 2015, emissions from electricity use in buildings accounted for 96% of the EMMS group’s total Scope 2 emissions, while emissions from heating contributed 4% of total emissions. Between 2014 and 2015, Scope 2 emissions reduced by 267,000 tonnes (8%) to 2,908,000 tonnes. This was largely a result of the significant decrease in emissions from electricity used in buildings (264,000 tonnes, or 9%). This decrease was primarily driven by the significant increase in the proportion of renewable electricity used by EMMS participants. Indeed, five of our participants have already switched to purchasing 100% renewable electricity, which is an extremely commendable achievement.

The group has maintained steady progress towards reducing Scope 2 emissions since the start of the programme, illustrated by a decrease of 1,563,000 tonnes (35%) since 2008. This decrease has been driven by the reduction in electricity consumption from 9.95 TWh in 2008 to 7.96 TWh in 2015 (see Chapter 1: EMMS for related financial savings). Moreover, the proportion of renewable electricity used in buildings increased from 15% to 25% in 2008 and 2015, respectively.

## DEGREE DAYS

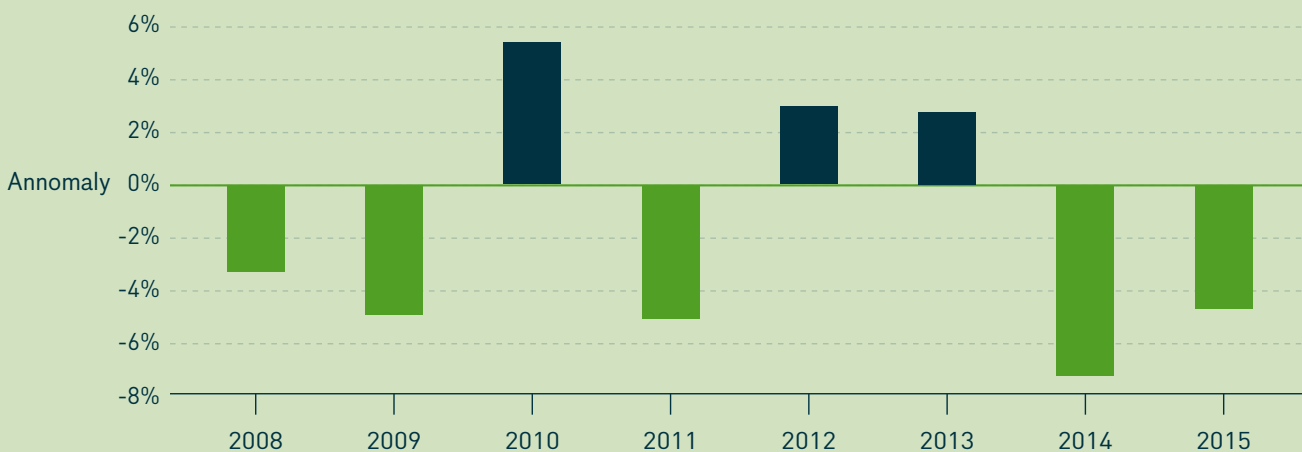
Degree days are a tool that can be used to analyse the impact of weather on energy consumption in buildings. They are a measure of the difference between the outdoor temperature and some reference (or base) temperature over a specific time period.

- Heating Degree Days (HDD) - A measure of how far below a certain threshold the temperature drops (in degrees), and for how long (in days)
- Cooling Degree Days (CDD) - A measure of how much above a certain threshold the temperature rises (in degrees), and for how long (in days)

Monitoring degree days can be helpful when trying to understand year-on-year changes in energy consumption in a building. For example, the amount of energy used to heat a building in different years will vary depending on the severity of the winter. This can therefore impact on both Scope 1 and 2 emissions.

In the half-year scanning exercise undertaken in 2014 and 2015, several posts indicated that they had experienced unusually warm winters. Based on the number of heating degree days aggregated across the 21 countries represented by EMMS participants (PostNord represents both Denmark and Sweden), both 2014 and 2015 were indeed anomalously warm years. As shown in Figure 9, the number of heating degree days recorded in 2015 was approximately 5% below the long-term (1981-2010) average of 124,000 per year. Meanwhile, 2014 exhibited the fewest heating degree days (115,000) since the EMMS programme began in 2008.

**Figure 9: Annual number of heating degree days across the 21 countries represented by EMMS participants, as a proportion of the 1981-2010 average.**



Conversely, as a result of 2015 being the warmest year on record, the number of cooling degree days aggregated across the 21 countries represented by EMMS participants was 20% higher than the long term (1981-2010) average. Therefore, in an anomalously warm year the energy saved on heating may be offset by increased cooling requirements. With global temperatures expected to continue to increase in the coming decades, the number of heating degree days recorded each year are likely to decrease. Meanwhile, it is likely that the number of cooling degree days per year will increase, as warmer summer conditions increase the need for cooling.

## EMISSIONS ANALYSIS: SCOPE 3

Subcontracted road and air transport contributed the biggest component (73%) of the EMMS group's total Scope 3 emissions in 2015, followed by employee commuting (26%), and business travel (1%). Total Scope 3 emissions increased by 488,000 tonnes (or 5%) between 2014 and 2015. This was driven by increases reported in both employee commuting (74,000 tonnes, or 3%) and also sub-contracted air transport (527,000 tonnes, or 17%). However, counteracting this increase was a reduction in emissions from business travel of 12,000 tonnes, while sub-contracted road transport emissions decreased by 102,000 tonnes (2%) between 2014 and 2015. However, despite this reduction, as a result of the substantial rise in emissions from outsourced air transport the combined increase in sub-contracted transport emissions amounted to 425,000 (6%). This trend of increased sub-contracting is expected as posts strive to remain competitive amid the rising trend in parcel volumes. With this in mind, and in line with IPC's intention to place greater emphasis on efficiency, our new efficiency target includes Scope 3 sub-contracted transport emissions (see the "Delivery Efficiency" section of the report).

**Table 4: Carbon performance data in tonnes of CO<sub>2</sub> (table subject to PwC limited assurance assignment)**

Indicator	2008 baseline	2014	2015
<b>Scope 1: Transport</b> (vehicles, aviation, rail)	3,175,000	3,020,000	3,180,000
<b>Scope 1: Heating</b> (gas, heating, fuel, oil, steam)	1,184,000	774,000	733,000
<b>Other Scope 1</b>	-	31,000	30,000
<b>Scope 2: Electricity</b> (including electric vehicles)	4,471,000	3,056,000	2,791,000
<b>Other Scope 2</b>	-	119,000	117,000
<b>Sub-total: Scope 1 and 2</b>	8,830,000	7,000,000	6,852,000
<b>Scope 3a: Outsourced road and air transport</b>	-	7,424,000	7,849,000
<b>Sub-total: Scope 1, 2 and 3a</b>	-	14,424,000	14,701,000
<b>Scope 3b: Employee commuting and business travel</b>	-	2,786,000	2,849,000
<b>TOTAL</b>		<b>17,210,000</b>	<b>17,550,000</b>
<b>Percent of renewable electricity used in buildings</b>	15%	16%	25%
<b>Percent of alternative vehicles in fleet</b>	10%	13%	14%
Please see Annex for more information on indicator definitions, details on reporting participants, and the PwC assurance report.			

## TOTAL CARBON EMISSIONS

### SCOPE 1 AND 2: 2008-2015

Having last year successfully reached the EMMS programme's target of a 20% reduction in Scope 1 and 2 carbon emissions from the 2008 baseline, this year saw a further decrease in the group's emissions. In 2015, Scope 1 and 2 carbon emissions amounted to 6,852,000 tonnes, compared to 7,000,000 tonnes in 2014. As discussed in the sections above, this was as a result of the considerable progress made in reducing Scope 1 heating and Scope 2 electricity. Overall, the group has achieved a reduction in Scope 1 and 2 emissions of 22.4% (1,978,000 tonnes) from the 8,830,000 tonnes reported in 2008. A significant reduction has been made in Scope 2 electricity (38%) since the start of the programme, and also in Scope 1 heating (38%). The overall reduction in Scope 1 and 2 emissions since the start of the programme represents a group annual average decrease of 283,000 tonnes.

Notably, Scope 2 emissions reductions have been occurring at a faster rate than Scope 1 reductions. Between 2008 and 2015, Scope 1 emissions have reduced from 4,359,000 tonnes to 3,944,000 tonnes at an average of 59,000 tonnes per year, while Scope 2 emissions have reduced from 4,471,000 tonnes to 2,908,000 tonnes at an average of 223,000 tonnes per year – over three times the rate of Scope 1. As mentioned previously, significant reductions in Scope 2 emissions are primarily attributed to a reduction in emissions produced from electricity consumption. This can be achieved by switching to purchasing electricity from renewable energy sources, which posts are increasingly doing, and by generating renewable energy on company owned buildings, as well as improving building energy efficiency. Examples of such developments include upgrading to more efficient lighting and installing photovoltaic systems (solar panels). PostNL installed solar panels at its first sorting office in June 2016, and aims to have installed solar panels at a further 12 sorting centres by the end of the year, and at the remaining seven in 2017. Once fully operational, the company's solar panels are expected to reduce the postal service's carbon emissions by approximately 1,800 tonnes per year. Elsewhere, Swiss Post, in addition to sourcing 100% renewable electricity, now operates ten solar power systems with a peak capacity of 5,560 kW.

Reducing emissions from transport, which makes up a significant proportion of Scope 1 emissions, is often more challenging for posts. For example, many posts have encountered challenges attempting to transition away from emissions intensive forms of road transport, such as heavy goods vehicles, towards alternative-fuel vehicles. E-vehicles and scooters are a popular choice in urban areas as charging stations can be installed and their range and loads need not to be extensive. However, with increasing amounts of parcels to be delivered it is likely that posts will need to use larger vehicles, and often across large distances, such that electric models are not necessarily suitable or available. There is a small amount of usage of other renewable energy sources, such as biogas, however, not yet on a scale that would have significant impact on group results (see Alternative Vehicles section). While research, development, and piloting of new models are occurring in partnership with manufacturers, the investment required is often substantial, which can be prohibitive for some posts. This is often the case if the fuel is not already widely available through national infrastructure. IPC recognises that many posts are leading the way in alternative-fuel technologies in their respective countries, and will continue to support posts in reducing emissions from transport.

In addition, changing driving behaviour and encouraging eco-driving can make a significant contribution to reducing emissions from transport. A number of posts are already making progress in this respect, and have introduced eco-driving initiatives for drivers. For example, in 2016 Poste Italiane launched an eco-driving initiative designed to encourage employees to adopt more environmentally sustainable driving techniques. The company estimates that this could reduce fuel consumption by up to 15%, thereby also reducing associated carbon emissions. Meanwhile, CTT's Drivers' Challenge, which is now in its second year, has delivered significant results, with the best performing teams achieving reductions in fuel consumption of up to 16% below the company's average. In addition, as part of Posti's 'Posti Green' initiative the company has identified a number of priority measures to improve delivery efficiency, including route optimisation, eco-driving, high utilisation rates, and transport aggregation. IPC continues to emphasise the importance of driving in an economic and fuel-efficient manner and to further encourage investment in eco-driving initiatives by inviting posts to participate in the IPC Drivers' Challenge. Following the success of the third edition of the Drivers' Challenge held in Lapland, Finland in March 2015, the fourth edition will be hosted by bpost in November 2016 at the legendary Spa-Francorchamps Formula 1 track in Belgium. Moreover, unique to the 2016 edition, bpost will simultaneously organise its national drivers' challenge on the same track, and will also host a 'green mobility and innovation' exhibition representing the latest in green delivery and eco-friendly mobility. With one of Belgium's largest delivery fleets, bpost provides eco-driving training for its van drivers, which saves thousands of litres of fuel each year.

## 3.3 ACTIVITY INDICATORS

### RENEWABLE ELECTRICITY

This year the group reported that 25% of total electricity used was considered green electricity, which represents a significant increase from 16% in 2014. This substantial growth in the use of renewable electricity has contributed to the significant decrease in Scope 2 electricity emissions (see Scope 2 section). However, while we recognise the group's achievement in increasing renewable energy usage, 2.8m tonnes of these emissions remain to be reduced, providing participants with further opportunities to reduce emissions using measures such as switching to a green electricity provider, or developing their own green energy supplies (see Case Studies section for measures posts are already taking). If this maximum reduction in Scope 2 electricity emissions were to be achieved, total Scope 1 and 2 emissions could be reduced by a further 32% of the 2008 baseline, in addition to the 22% reduction that has already been accomplished.

The percentage of renewable electricity used in buildings varies throughout the group. In 2015, 19 (95%) of EMMS participants reported purchasing or generating some form of green electricity in their CMP Questionnaire. Of these, five use solely renewable electricity. IPC therefore encourages participants to further their efforts to switch to purchased or self-generated renewable electricity in order to achieve immediate and substantial emissions reductions.

### ALTERNATIVE-FUEL AND ALTERNATIVE-FUEL CAPABLE VEHICLES

For the fifth successive year EMMS participants were required to provide disclosure and categorisation of their alternative-fuel vehicles. Participants report on the numbers of alternative vehicles under the following 11 categories: CNG, LNG, LPG, E85, M85, Electric, Hybrid, Hydrogen, Bioethanol, Bicycles, and Other. Normal bicycles (self-propelled vehicles) are excluded from total alternative-fuel vehicles / alternative-fuel capable vehicles figures to enable better comparison between trends in technology use and development. E-bicycles are included under electric vehicles.

When transitioning to more sustainable modes of transport, posts' utmost ambition should be to maximise delivery by bicycle or foot, where possible, because of the environmental and employee health benefits. With these aspects in mind, we therefore encourage participants to avoid replacing normal bicycles with e-bicycles. IPC also prefers for vans and cars to be replaced with normal bicycles rather than electric models, where feasible. We expect that application of these recommendations will result not only in the removal of unsustainable models from fleets, but will reduce the total number of vehicles as opposed to shifting numbers from the non-alternative to alternative category (which excludes traditional bicycles).

Since 2012 the total number of vehicles has increased by 67,000, while the total number of alternative-fuel / alternative-fuel capable vehicles has increased by 19,000. Alternative vehicles now account for 14.2% of the group's combined fleet, compared to 12.5% in 2012. Between 2014 and 2015, the total number of vehicles increased by 7,000, with the number of alternative-fuel / alternative-fuel capable vehicles increasing by 9,000. This suggests that more sustainable vehicle models are being used to replace non-alternative varieties and/or that non-alternative vehicles are being removed from the fleet and not replaced.

**Table 5: 2012 – 2015 comparison of % of alternative-fuel / alternative-fuel capable vehicles**

	2012	2013	2014	2015
<b>Total vehicles</b>	585,000	651,000	644,000	652,000
<b>Total alternative-fuel / alternative-fuel capable vehicles</b>	73,000	83,000	83,000	92,000
<b>% of alternative-fuel vehicles / alternative-fuel capable vehicles in current EMMS group</b>	12.5%	12.7%	12.9%	14.2%

The number of electric vehicles reported increased by 2,200 between 2014 and 2015, while electric models account for 29% of all alternative-fuel vehicles / alternative-fuel capable vehicles. Indeed, several participants are increasing the number of electric vehicles in their delivery fleets. For example, following the purchase of 241 new electric vehicles in June 2015, Posten Norge’s fleet of 580 electric mopeds, 420 electric cars, and 180 electric trolleys comprises the largest electric vehicle fleet in Norway. Meanwhile, Le Groupe La Poste owns one of the world’s largest electric vehicles fleets (at nearly 29,000 vehicles). These examples demonstrate that the postal sector is a frontrunner in transitioning to low carbon transport. For more information and for other examples, please see the Case Studies section.

None of the EMMS participants are reporting the use of M85- (methane-) or LNG vehicles, which could be a result of factors such as purchase costs, availability of national infrastructure, energy efficiency, and range. IPC aims to continue to encourage posts to use alternative-fuel capable vehicles, through best practice sharing and initiatives such as the international IPC Drivers’ Challenge. In addition, with increasing numbers of parcels to be delivered, there is a greater requirement for large vehicles and trucks. IPC therefore will focus more on large vehicles and trucks, which is currently under-developed in terms of alternative-fuel models.

**Table 6: 2014 – 2015 comparison of alternative-fuel / alternative fuel-capable vehicles types**

Type	2014	2015	2014-2015 Change
<b>E85 (Ethanol fuel blend)</b>	38,900	43,000	4,200
<b>Electric (bicycle, scooter, van)</b>	24,700	26,900	2,200
<b>Others – including hybrid, hydrogen, Compressed Natural Gas (CNG) and Liquid Propane Gas (LPG)</b>	19,400	22,500	3,100
<b>Total alternative-fuel / alternative-fuel capable vehicles</b>	82,900	92,400	9,500

IPC is also pleased to report that the number of self-propelled bicycles in participants’ fleets increased by 4,500 between 2014 and 2015 (from 82,800 to 87,300 vehicles). In addition, the postal delivery distance travelled on foot increased by 947,000km between 2014 and 2015 (distance includes both owned and subcontracted postal delivery). Over 114m km of postal delivery was travelled on foot in 2015 – equivalent to walking to the moon and back 150 times. This illustrates participants’ commitment to both minimising transport fuel demand and reducing the proportion of unsustainable vehicles within their fleets.

# 4. ANNEXES



## INDICATOR DEFINITIONS

### DELIVERY EFFICIENCY: TOTAL CO<sub>2</sub> IN GRAMS PER LETTER MAIL AND PER PARCEL (SCOPE 1, 2 AND 3A - OUTSOURCED TRANSPORT):

Calculation of CO<sub>2</sub> emissions from Scope 1 and Scope 2 sources, and Scope 3 outsourced transport per letter mail and per parcel. The emissions of CO<sub>2</sub> expressed in grams are divided by the total number of letter mail and of parcel items processed. For details of the methodologies used by participants to allocate emissions either to letter mail or to parcel categories see Annex Table: 'Allocation methodologies for letter mail and parcel emissions'.

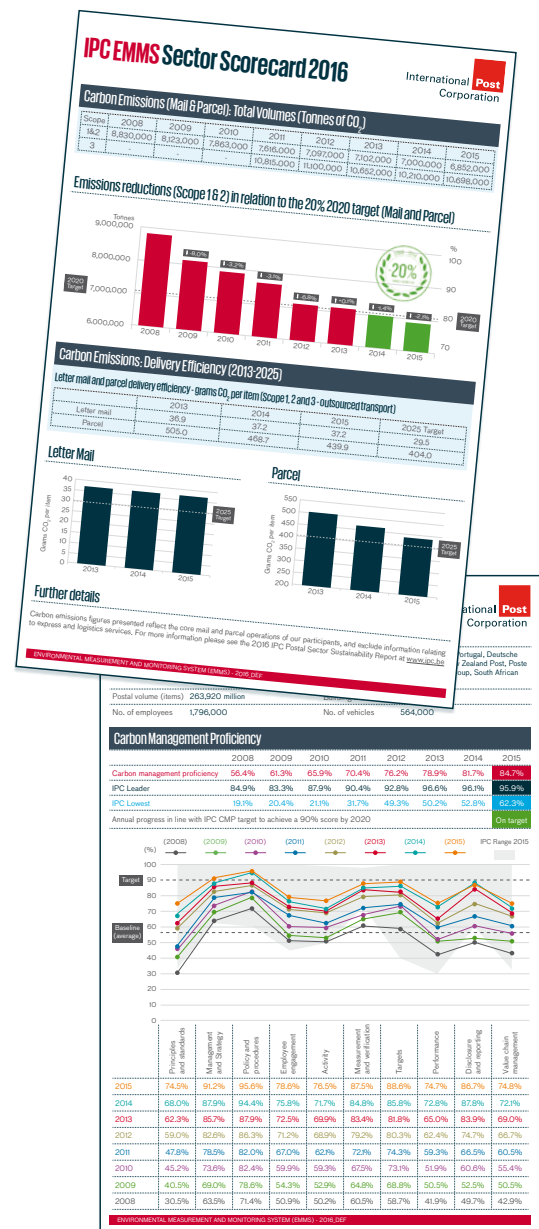
### PERCENTAGE OF RENEWABLE ELECTRICITY USED IN BUILDINGS:

The percentage of additional electricity purchased or self-generated that is obtained from 'green' sources, i.e. it does not typically include green electricity already present in the national grid.

### PERCENTAGE OF ALTERNATIVE VEHICLES IN FLEET:

Includes the total number of alternative-fuel vehicles within the owned vehicle fleet. This number is expressed as a percentage of the total number of vehicles that are owned by the company. Alternative vehicles are vehicles that run on fuels other than standard petrol and diesel. This includes electric vehicles, hydrogen vehicles, vehicles that run exclusively on biofuels or that run on LPG and CNG. It excludes vehicles that run on bio/mineral fuel mixes that are at or below the nationally agreed minimum content of bio/mineral fuel. It also excludes traditional bicycles.

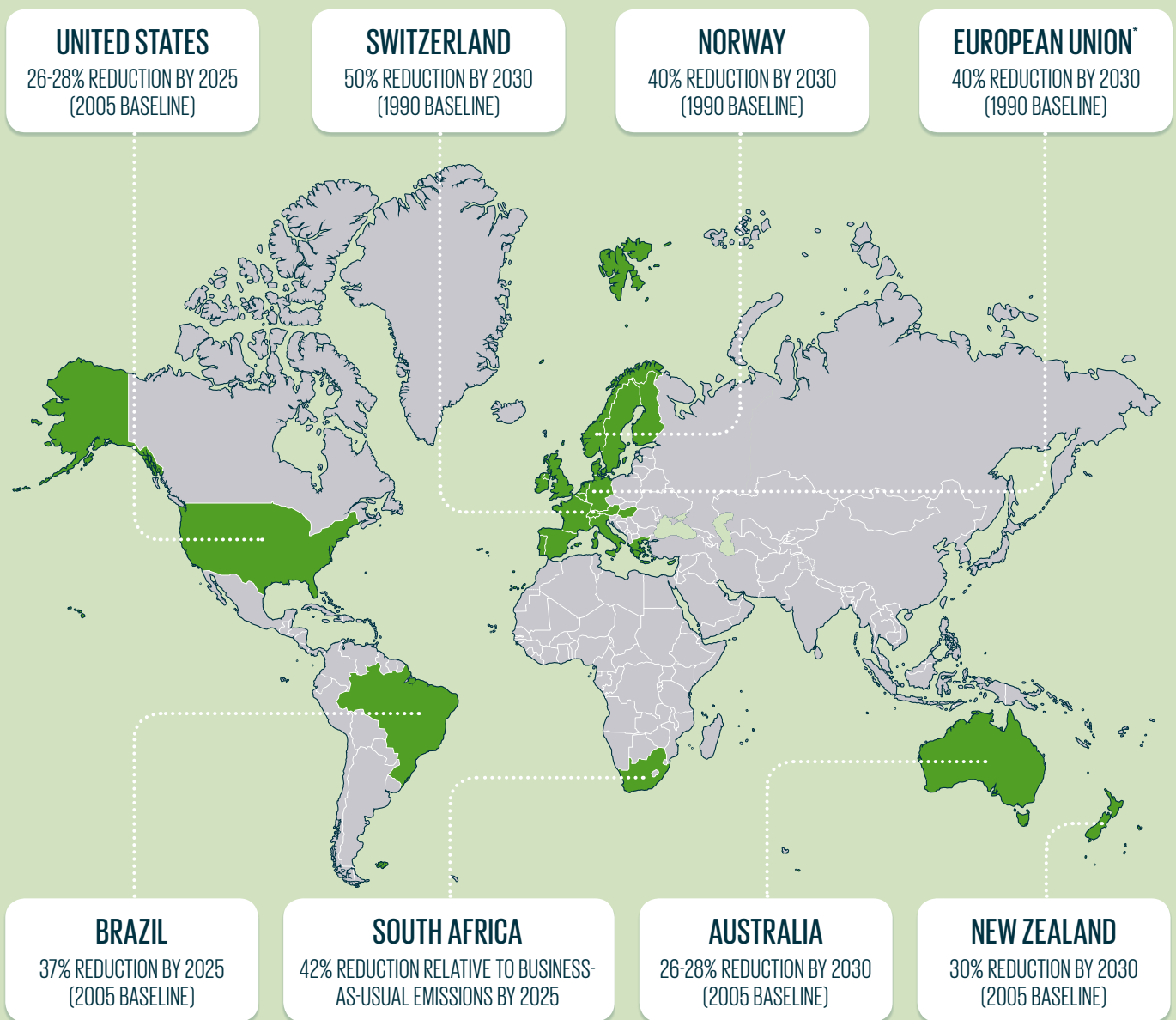
## POSTAL SECTOR SCORECARD





## MEMBER STATES' NATIONALLY DETERMINED CONTRIBUTIONS (NDCs)

The figure below provides details of the Nationally Determined Contributions (NDCs) of member states represented by EMMS participants to the Paris Agreement. The climate actions communicated in these NDCs include emissions reduction commitments, which take into account a country's domestic circumstances and capabilities. The NDC of the EU and its 28 member states encompasses 14 nations represented by EMMS participants: Ireland, Spain, Austria, Portugal, Belgium, Denmark, France, Finland, Luxembourg, Italy, Sweden, Germany, United Kingdom and the Netherlands.



Source: United Nations Framework Convention on Climate Change (UNFCCC), Intended Nationally Determined Contributions (INDCs): [http://unfccc.int/focus/indc\\_portal/items/8766.php](http://unfccc.int/focus/indc_portal/items/8766.php)

\* The EU and its 28 member states, including: Ireland, Spain, Austria, Portugal, Belgium, Denmark, France, Finland, Luxembourg, Italy, Sweden, Germany, United Kingdom and the Netherlands

## EXCLUSIONS AND ESTIMATIONS

The table below provides details of the EMMS programme participants, including their submissions to the programme in 2015, EMMS joining year, and any exclusions and estimations relevant to their reporting.

EMMS Participant	Carbon Management Proficiency (CMP)	Carbon Performance Indicators (CPI)	EMMS joining date	Exclusions & estimations
An Post	✓	✓	2008	Excludes subsidiaries, and sub contracted retail and delivery service units.
Australian Postal Corporation	✓	✓	2008	Excludes subsidiaries and joint ventures.
Austrian Post	✓	✓	2009	Excludes Scherübl and all subsidiaries outside Austria.
bpost	✓	✓	2008	
Canada Post Corporation	✗	✗	2008	
Correos	✓	✓	2008	
CTT Correios de Portugal	✓	✓	2008	Excludes sub-contracted air transport for express-international.
Deutsche Post DHL	✓	✓	2008	Exclusion of express and logistics business.
Empresa Brasileira de Correios e Telégrafos	✓	✓	2012	
Hellenic Post ELTA	✗	✗	2008	
Le Groupe La Poste	✓	✓	2008	Excludes small subsidiaries.
Magyar Posta Zrt	✗	✗	2008	
New Zealand Post Ltd	✓	✓	2008	Excludes associate companies and express/logistics operations in Australia.
Nigerian Postal Service	✗	✗	2012	
POST Luxembourg	✓	✓	2008	
Poste Italiane	✓	✓	2009	
Posten Norge	✓	✓	2008	
Posti	✓	✓	2008	Excludes Russian mail communication.
PostNL	✓	✓	2008	
PostNord	✓	✓	2008	Energy consumption related to buildings is for 7% based on estimations. Express and logistics included.
Royal Mail Group Plc	✓	✓	2008	Excludes subsidiaries and joint ventures.
South African Post Office	✓	✓	2010	Electricity consumption partly based on estimations.
Swiss Post	✓	✓	2008	
United States Postal Service	✓	✓	2008	19% of electricity consumption is estimated; 24% of natural gas consumption is estimated; 100% of renewable electricity is estimated.

## ALLOCATION METHODOLOGIES FOR LETTER MAIL AND PARCEL EMISSIONS

The table below provides details of the methodologies used by EMMS participants to calculate and allocate their emissions to letter mail and parcel categories.

Post	Items	Building emissions	Transport emissions	Subcontractor emissions
An Post	Actual	Allocation is based on split in revenue between letter mail and parcel operations.	Allocation is based on split in revenue between letter mail and parcel operations.	Allocation is based on split in revenue between letter mail and parcel operations.
Australian Postal Corporation	Actual	Allocation is based on costs (at an individual product level) between letter mail and parcel operations.	Allocation is based on finance expenditure (at an individual product level) between letter mail and parcel operations.	Allocations are based on expenditure and the finance allocations process. For the StarTrack business the allocation is based on a combination of expenditure and revenue allocation.
Austrian Post	Actual	Allocation is based on the split according to the number of square meters (settled payment unit) per business unit.	Vehicles are assigned to either the letter mail or parcels division. When vehicles are used for both letter mail and parcels cost allocation is used to split the emissions.	Subcontractor emissions for letter mail are based on kilometer data. Emissions for parcel subcontractors are estimated using the number of kilometres travelled, derived by a ratio calculation comparing parcel numbers with the subcontractor parcel numbers.
bpost	Actual	Allocation is based on the split according to the number of square metres, which are re-invoiced to the different business units.	Business activities are assigned to either letter mail or parcels.	Business activities are assigned to either letter mail or parcels.
Empresa Brasileira de Correios e Telégrafos	Actual	Allocation is based on the items percentage splits.	Allocation is based on the items percentage splits.	Allocation is based on estimated kilometres travelled for road and average fuel consumption per vehicle type, and number of hours of operation for air.
Correos	Actual	Allocation is based on costs between letter mail and parcels operations.	Allocation is based on costs between letter mail and parcels operations.	Allocation is based on costs between letter mail and parcels operations.
CTT Correios de Portugal		Allocation is based on number of items.	Allocation is based on weight.	Allocation is based on weight.
Deutsche Post DHL Group	Actual	Buildings are allocated to either letter mail or parcel operations and following this allocation, energy use data, m <sup>2</sup> area data and costs are assigned to the individual units, enabling emissions calculations.	The allocation is being performed on a vehicle level and where vehicles transport both letter mail and parcels, costs and fuel use data are allocated to the responsible unit who would then recharge the other.	Kilometer data forms the basis for the allocation of subcontracted road emissions (adjusted for the specific truck types). Emissions for domestic air travel are calculated using fuel data from the airline partner. Emissions for international air travel are calculated on an individual trip level taking into consideration specific routing, aircraft type and load utilization.
Le Groupe La Poste	Actual	Letter mail and Parcel have their own delivery organisation and process.	Letter mail and parcel have their own delivery organisation and process. Allocation for air transportation is based on freight rates (weight and number of items). For international air or maritime transportation the allocation is based on the split in carrying weight.	Letter mail and parcel have their own delivery organisation and process. Allocation for air transportation is based on freight rates (weight and number of items). For international air or maritime transportation the allocation is based on the split in carrying weight.
New Zealand Post Ltd	Actual	Most of the buildings in the network are either for letter mail or for parcels. If they are dual use emissions are allocated to the letter mail side of the business.	Allocation for domestic air freight and ground fuel (both related to delivery) is done using the financial control method drawing on cost information from within the business.	Allocation for domestic air freight and ground fuel (both related to delivery) is done using the financial control method drawing on cost information from within the business.
POST Luxembourg	Actual	Allocation is based on revenue split between mail and parcel operations.	Where not directly allocated to a category, emissions are allocated based on the actual numbers of items and distinction between letter mail and parcel divisions through the delivery stage.	Where not directly allocated to a category, emissions are allocated based on the actual numbers of items and distinction between letter mail and parcel divisions through the delivery stage.
PostNord	Actual	Allocation is based on actual weight of letter mail and parcels.	Allocation is based on actual weight of letter mail and parcels.	Allocation is based on actual weight of letter mail and parcels.
Poste Italiane	Actual	Allocation is based on revenue split.	Allocation is based on revenue split.	Allocation is based on revenue split.
Posten Norge	Actual	Allocation of emissions is based on m <sup>2</sup> usage of letter mail and parcel divisions.	Emissions from business activities is clearly assigned to letter mail, parcel (etc.) categories.	Business activities are assigned to either letter mail or parcel. Volumes (items and kg) used to calculate emissions. Weight is calculated by multiplying sales volumes by the maximum weight.
Posti	Estimation	Buildings are assigned to either letter mail or parcel divisions using an estimation based on actual figures.	Allocation based on actual volumes of items and distinction between letter mail and parcel divisions through the process stage.	Allocation based on actual volumes of items and distinction between letter mail and parcel divisions through the process stage.
PostNL	Actual	Emissions based on clear separation of letter mail and parcel divisions.	Emissions based on clear separation of letter mail and parcel divisions.	Emissions based on clear separation of letter mail and parcel divisions.
Royal Mail Group Plc	Actual	Allocation is based on revenue split.	Allocation is based on revenue split.	Allocation is based on revenue split.
South African Post Office	Actual	Allocation is based on actual weight of letter mail and parcels.	Allocation is based on actual weight of letter mail and parcels.	Allocation is based on actual weight of letter mail and parcels.
Swiss Post	Actual	Emissions from business activities clearly assigned to letter mail, parcel (etc.) categories. Building emissions are calculated using meter readings and split among different business units based on their assigned area.	Emissions from business activities clearly assigned to letter mail, parcel (etc.) categories. Transport emissions are calculated using the actual fuel use per business unit.	Emissions from business activities clearly assigned to letter mail, parcel (etc.) categories. Transport emissions are calculated using fuel use that is stipulated in the contract with the subcontractor.
United States Postal Service	Actual	Allocation is based on revenue split.	Allocation is based on revenue split.	Allocation is based on revenue split.

To the members of the board of the International Post Corporation, Amsterdam

# INDEPENDENT ASSURANCE REPORT ON THE IPC POSTAL SECTOR SUSTAINABILITY REPORT 2016

This report has been prepared in accordance with the terms of our engagement contract dated 8 December 2014, whereby we have been engaged to issue an independent limited assurance report in connection with the Postal Sector Sustainability Report 2016 (the “Sustainability Report”) as of and for the year ended 31 December 2015 of the International Post Corporation (the “Association”).

## MANAGEMENT'S RESPONSIBILITY

The Board of Directors of the Association is responsible for the preparation of the Sustainability Report in accordance with the criteria stated in the Environmental Measurement and Monitoring System (EMMS) Guidelines issued by the Association (summarised on page 45 and 46) (“the Criteria”).

This responsibility includes the selection and application of appropriate methods for the preparation of the Sustainability Report, for ensuring the reliability of the underlying information and for the use of assumptions and estimates for individual sustainability disclosures which are reasonable in the circumstances. Furthermore, management's responsibility includes the design, implementation and maintenance of systems and processes relevant for the preparation of the Sustainability Report.

## AUDITOR'S RESPONSIBILITY

Our responsibility is to express an independent conclusion about the indicators disclosed on page 51 of the Sustainability Report (“the Subject Matter Information”) based on our work performed. We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 “Assurance Engagements other than Audits or Reviews of Historical Financial Information”.

This standard requires that we comply with ethical requirements and that we plan and perform the engagement to obtain limited assurance as to whether nothing has come to our attention that causes us to believe that the Subject Matter Information is not fairly stated, in all material aspects, based on the Criteria.

The objective of a limited assurance engagement is to perform the procedures we consider necessary to provide us with sufficient appropriate evidence to support the expression of a conclusion in the negative form on the Subject Matter Information set forth in the Sustainability Report. The selection of such procedures depends on our professional judgment, including the assessment of the risks of management's assertion being materially misstated. The scope of our work comprised, amongst others the following procedures:

- Assessing and testing the design and functioning of the systems and processes used for datagathering, collation, consolidation and validation, including the methods used for calculating and estimating the Subject Matter Information at Association level and at member level;
- Conducting interviews with responsible officers at Association and member level (5 IPC EMMS participants were visited: Le Groupe La Poste, Österreichische Post, Posten Norge, New Zealand Post Group, and the United States Postal Service);
- Inspecting internal and external documents.

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We have evaluated the Subject Matter Information against the Criteria. The accuracy and completeness of the Subject Matter Information are subject to inherent limitations given their nature and methods for determining, calculating or estimating such information. Our Limited Assurance Report should therefore be read in connection with the Criteria.

### OUR INDEPENDENCE AND QUALITY CONTROL

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Our audit firm applies International Standard on Quality Control (ISQC) n° 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### CONCLUSION

Based on our work, as described in this Independent Limited Assurance Report, nothing has come to our attention that causes us to believe that the Subject Matter Information, is not fairly stated, in all material respects, in accordance with the Criteria.

### RESTRICTION ON USE AND DISTRIBUTION OF OUR REPORT

Our assurance report has been made in accordance with the terms of our engagement contract. Our report is intended solely for the use of the Association's Board of Directors in connection with the Subject Matter Information set forth in the Sustainability Report as of and for the year ended 31 December 2015 and should not be used for any other purpose. We do not accept, or assume responsibility to anyone else, except to the Association for our work, for this report, or for the conclusions that we have reached.

Sint-Stevens-Woluwe, 4 November 2016

PwC Bedrijfsrevisoren bcvba  
Represented by

A handwritten signature in blue ink, consisting of a large, stylized 'M' and 'D' intertwined, enclosed within a horizontal oval shape.

Marc Daelman\*  
Registered auditor

\* Marc Daelman BVBA  
Board Member represented by its fixed representatives  
Marc Daelman

## IPC'S SUSTAINABILITY PERFORMANCE

IPC is an active member of the United Nations Global Compact, and as such is committed to taking a precautionary approach to environmental challenges, engaging in initiatives to promote environmental responsibility and encouraging the use of environmentally friendly technology. While this report focuses on how we put this into practice through our efforts with EMMS participants, we also ensure that our own operations are in line with these commitments.



### OUR OWN CARBON EMISSIONS REDUCTION MEASURES AND RESULTS

In 2015, our own carbon emissions amounted to just over 700 tonnes of CO<sub>2</sub>. This represents an 11% increase from the 635 tonnes in 2014. Emissions from road travel (business and commuting), heating, business air travel, public transport, and paper usage all increased slightly between 2014 and 2015; however, electricity emissions remained zero due to IPC's continued use of renewable electricity. Of IPC's 2015 emissions, 57% were associated with business air travel, while 36% were associated with road travel (business and commuting). The remaining 7% were associated with heating, paper usage, etc. In order to help reduce emissions from business travel, we place an emphasis on the use of alternative options, such as teleconferencing and remote presentation technologies (for example, WebEx and webinar techniques).



Cookstove Project  
in Uganda

### CARBON EMISSIONS COMPENSATED

For the eighth consecutive year we have partnered with the Climate Neutral Group to compensate our carbon emissions. The last six years of emissions have been fully offset with Gold Standard credits from Cookstove projects in Africa. In 2015, credits were used from the Cookstove Project in Uganda. This project has a positive impact on both climate and local communities. In co-operation with local communities, efficient charcoal ovens are developed and made available for the poorest households. Production and sales of the ovens takes place through a network of local companies, and regular awareness campaigns are developed to promote the use of efficient stoves. By replacing traditional cooking with fuel efficient stoves, carbon emissions are reduced and carbon credits generated. Revenues from carbon credits sales are invested in upscaling the project in order to provide maximum access to the stoves, while also creating jobs for local employees producing the stoves. This project allows households in Uganda to cut fuel bills by over a third, and therefore makes a significant contribution to poverty alleviation in the region. In addition, IPC also offset its GHG emissions for the year 2014 in association with the UNFCCC's Climate Neutral Now initiative using UN Certified Emissions Reductions.

## WASTE MANAGEMENT EFFORTS

Reductions in paper use are driven through the continued implementation of a minimal printing policy and – unless there are good and pressing reasons – IPC encourages the printing of documents in black and white and on double-sided paper only. Our printing paper is 100% Forest Stewardship Council (FSC) and EU Ecolabel certified. We provide recycling facilities in our communal areas so that employees can recycle glass, cardboard and plastic.

## ACKNOWLEDGEMENTS

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### **Content**

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## IPC PUBLICATIONS

IPC produces a broad range of publications and electronic information that provide insight into the complex and evolving postal sector. For more information, please visit our web site at [www.ipc.be](http://www.ipc.be) or write to [publications@ipc.be](mailto:publications@ipc.be).

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