Power Usage Effectiveness
2014: 1.36

Amadeus data centre

Carbon Disclosure Project score
2014: 93-A
Environmental and social commitment

1. Environmental sustainability
2. Social commitment

- 140 Social commitment projects carried out in 57 countries
- +2,000 PCs donated to disadvantaged communities
6. Environmental and social commitment_ Environmental sustainability

6.1 Environmental sustainability

Since the 1970s environmental concerns have only increased across all geographies, economic sectors and environmental fields. At Amadeus we believe this trend will continue in the foreseeable future.

Therefore, travel industry sustainability requires that environmental concerns be integrated into the business equation as a critical factor. Amadeus’ vision is focused on a solid and long-term commitment to industry environmental sustainability.

Amadeus environmental strategy is based on three pillars:

- Amadeus operations
  Optimise the environmental performance of Amadeus operations.
- Environmental benefits of Amadeus solutions
  Help our customers achieving their environmental objectives.
- Joint industry initiatives
  Work with other industry stakeholders on common environmental projects.

In the following pages we will review our status and priorities for each of the three elements of our environmental strategy.

Amadeus operations

The main drivers of the direct environmental impact of Amadeus’ operations are the electricity used in our data centre in Germany and the regular use of office buildings at our various sites across the world.

The infrastructure management team at our data centre works towards the continuous improvement of the energy efficiency of this critical installation. Our initiatives in this area are based on recommendations from external consultants and on our own experts’ analysis. Some of the principal Key Performance Indicators that we use are the total energy consumption and the electricity consumption per transaction* processed.

As for our office buildings across the world, we monitor our performance through the Amadeus Environmental Management System (EMS).

Amadeus Environmental Management System (EMS): technical and geographical scopes

The EMS is the tool we use in Amadeus to measure, monitor and identify best practices, and continuously improve the environmental performance of our operations.

Amadeus has been included in the Carbon Disclosure Leadership Index by the Carbon Disclosure Project for our excellent performance in taking measures to reduce emissions linked to our operations. The Amadeus Data Processing Centre has been recognised as an energy efficient data centre.

*Transaction: in this context, transactions processed at the data centre are defined as basic operations linked directly to our business. Transactions include air and non-air bookings, Passengers Boarded (PBs), and e-commerce Passenger Name Records (PNRs). It is worth noting that, given the increasing amount of information processed per traveller and the increasing sophistication of passenger service systems, the complexity and amount of data included in each transaction is growing significantly.
The EMS monitors resource consumption data on five items related to the environmental impact of our business:

**Energy consumption:** the most important energy use for Amadeus is electricity, but we also include in the EMS natural gas data, normally used for heating in some of our buildings, as well as diesel, used in our data centre for guaranteed uninterrupted power supply. Within electricity, we measure and evaluate separately the electricity for the data centre from that used in our office buildings.

**CO₂ emissions:** in order to measure CO₂ emissions, we follow the Greenhouse Gas Protocol (GHG Protocol)* standards:

- In Scope 1, we include emissions from natural gas and diesel.
- In Scope 2, we include emissions related to the use of electricity in our office buildings worldwide and in the data centre. The conversion factors (grams of CO₂ per kWh) are taken from the latest updated averages for each country published by the International Energy Agency (IEA).
- In Scope 3, we include emissions from paper consumption and from business travel. For air travel, we use the International Civil Aviation Organization (ICAO) carbon calculator. Emissions are calculated for each individual trip.

*The Greenhouse Gas Protocol (GHG Protocol) is the most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions. The GHG Protocol classifies emissions in three scopes.

**Paper consumption:** we report paper consumption at our premises worldwide either by gathering the amount of paper bought during the year or, when available, through automated badge-based printing systems. These automated systems permit a more precise monitoring and facilitate the identification of actions for improvement.

Amadeus Sydney is one of the Amadeus offices that has implemented the badge printing system. This printing solution can only be executed with the physical presence of the employee identification card at the printer, reducing the number of printing jobs not collected at the printer, improving the confidentiality and avoiding the printing of unnecessary identification cover pages.

**Water use:** the use of water in Amadeus is divided into three categories:

- Water used at office buildings in kitchens, toilets, etc.
- Water used for irrigation, in those cases where we have gardens and the means of separately measuring irrigation related consumption.
- Water used for cooling of servers, principally at the data processing centre.

**Waste generation:** this last item refers to the waste generated at our premises from both kitchens and general office use. Waste is difficult to measure since in some cases we do not have the means or documentation to report part of the waste. The principal sources of information to report waste in our case are the recycling companies that include in their reports and invoices the amount of weight collected for recycling at our premises. On the other hand, waste generated by extraordinary activities like works done in buildings are generally measured, but for comparability purposes they are reported separately from regular waste.

Regarding the geographical scope, the eleven sites included in the EMS are:

- Nice, (France)
- Madrid, (Spain) (Amadeus Commercial Organisation)
- Bangkok, (Thailand)
- Bangalore, (India)
- Madrid, (Spain) (headquarters)
- Sydney, (Australia)
- Erding, (Germany)
- London, (United Kingdom)
- Paris, (France)
- Miami, (US)
- Bad Homburg, (Germany)

Since 2009, we have included in the EMS reporting our top ten sites worldwide. In 2013, we added Amadeus Software Labs India (Bangalore), which has become the second largest Amadeus site worldwide by number of employees. The EMS now covers 80% of all employees, and approximately 90% of the total Amadeus resource consumption worldwide.

Amadeus has 71 commercial offices (ACOs) worldwide, some of which are very small. For this reason, it is not viable to report data from all Amadeus sites. We focus our efforts instead on our largest sites by number of employees. Nonetheless, all our ACOs are encouraged to implement measures to reduce consumption, and best practices are shared among all sites.
Environmental performance: full visibility in one single figure

The environmental performance of our operations is consolidated in one single figure that represents our performance as compared with the previous year. This detailed Amadeus methodology facilitates reporting to top management, without losing the visibility on the individual performance of each geographical site or specific item. The consolidation of results in one single figure is carried out following the process explained below.

1. **Total absolute and efficiency figures**

   Measurement, recording and verification of resource consumption linked to our operations. The measurement includes both total absolute consumption and efficiency ratios and per transaction process.

2. **Performance vs. previous year**

   Comparing performance with previous year: our point of reference to measure performance is the resource consumption of the previous year. Performance is calculated as a percentage over the previous year, where an increase in consumption is considered negative and a reduction as positive.

3. **Weighting of the different impacts**

   Assigning a weighting for each of the five items measured at our office buildings. We assess the importance of each item taking into account both their individual total impact as well as our capacity to manage each parameter (for example, we have a direct responsibility and management capacity over the amount of paper used at our offices; in contrast, we do not have the same capacity to manage the CO2 emissions released as a consequence of our use of electricity, since this depends basically on the electricity production mix of each country). As a consequence of this analysis we allocate the following weightings:

<table>
<thead>
<tr>
<th>Item</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity consumption</td>
<td>40%</td>
</tr>
<tr>
<td>CO2 emissions</td>
<td>20%</td>
</tr>
<tr>
<td>Paper consumption</td>
<td>20%</td>
</tr>
<tr>
<td>Water consumption</td>
<td>10%</td>
</tr>
<tr>
<td>Waste generation</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Office buildings**

<table>
<thead>
<tr>
<th>Resource Consumption</th>
<th>Performance vs. previous year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td></td>
</tr>
<tr>
<td>CO2 emissions</td>
<td></td>
</tr>
<tr>
<td>Paper</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td></td>
</tr>
</tbody>
</table>

**Data centre**

<table>
<thead>
<tr>
<th>Resource Consumption</th>
<th>Performance vs. previous year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total electricity consumption</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Efficiency: Consumption per employee**

<table>
<thead>
<tr>
<th>Resource Consumption</th>
<th>Performance vs. previous year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td></td>
</tr>
<tr>
<td>CO2 emissions</td>
<td></td>
</tr>
<tr>
<td>Paper</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td></td>
</tr>
</tbody>
</table>

**Efficiency: electricity consumption per transaction processed**

<table>
<thead>
<tr>
<th>Performance vs. previous year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
</tbody>
</table>
It would be misleading to provide a view on environmental performance simply based on absolute figures for resource consumption. For example: environmental performance is much better when resource consumption is reduced in a context of double digit company growth than in a context of company recession. We factor in company growth using the evolution of number of employees (for office buildings) and number of transactions processed (for the data centre).

### Overall environmental performance vs. previous year in one single figure

#### Total consumption and efficiency performance weighted by employee growth

<table>
<thead>
<tr>
<th>If the change in number of employees is:</th>
<th>then the weight of the Absolute target is:</th>
<th>and the weight of the Efficiency target is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Between 2 and 3%</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>Between 3 and 4%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>More than 4%</td>
<td>25%</td>
<td>75%</td>
</tr>
</tbody>
</table>

#### Total consumption and efficiency performance weighted by transactions growth

<table>
<thead>
<tr>
<th>If the change in number of transactions is:</th>
<th>then the weight of the Absolute target is:</th>
<th>and the weight of the Efficiency target is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Between 5 and 10%</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>Between 10 and 15%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>More than 15%</td>
<td>25%</td>
<td>75%</td>
</tr>
</tbody>
</table>

### Leveraging data centre vs. offices

Distinction between the operations at the data centre from the office buildings: considering the total impact of each type of infrastructure, we allocate the following weightings in order to calculate the total company environmental impact:

- **Office buildings**: 60%
- **Data centre**: 40%
In order to guarantee continuous improvement and realistic objectives, our strategy is based on improving the environmental performance taking as a reference the data from the previous year. As depicted in the graph below, our environmental strategy has delivered significant results since its inception in 2009.

Despite our significant growth in employees, transactions and revenue, resource consumption associated to our operations has grown at a significantly slower pace during 2014. The following graphs analyse the evolution of our performance for each parameter in the EMS over the years.

### Amadeus data centre environmental performance

#### 2014 vs. 2010

**Business growth vs. Environmental performance**

<table>
<thead>
<tr>
<th>Efficiency</th>
<th>2014</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO₂ emissions (scopes 1+2) per employee</td>
<td>-12.3%</td>
<td>-21.8%</td>
</tr>
<tr>
<td>Electricity per 1,000 transactions processed at data centre</td>
<td>-20.9%</td>
<td>-18.4%</td>
</tr>
<tr>
<td>Total CO₂ emissions (scopes 1+2)</td>
<td>15.9%</td>
<td>18.4%</td>
</tr>
<tr>
<td>Total electricity consumption data centre</td>
<td>2.8%</td>
<td></td>
</tr>
<tr>
<td>Total electricity consumption office buildings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Amadeus data centre energy efficiency

(Improved efficiency 2014 vs. 2010: PUE in 2014: 1.36)

- kWh required per 1,000 transactions
- Total GWh data centre

*Excluding 2014 acquisitions (Newmarket. UFIS and i:FAO) for comparability purposes.

### Energy-efficient data centre certification from TÜV SÜD

(Obtained in 2010 and renewed in 2012)

Our external credentials in this area include the certification received in 2010 and renewed in 2012 from TÜV SÜD as an energy-efficient data centre. The certification process involved an in-depth review of the data centre operations, as well as recommendations for improvement.

*Improved energy efficiency in terms of kWh required per 1,000 transactions. PUE stands for Power Usage Effectiveness and is a common metric used to measure the energy efficiency of data centres. The closer to 1 the PUE, the more efficient the data centre is. Typically a PUE below 1.5 is considered significantly better than average.
Amadeus top 10 sites environmental performance*

*Even though the Amadeus EMS covers our top 11 sites worldwide, we include in the graphs only the top 10 for comparability purposes, since our site in Bangalore (India) was incorporated in the EMS in 2013. For detailed information on the environmental performance in our site in Bangalore, see our Annex GRI tables.
6. Environmental and social commitment_ Environmental sustainability

Amadeus France reforestation project – from biodiversity to agroforestry
For the second consecutive year, Amadeus France engaged in a joint project in cooperation with partners ekodev and PUR Project to launch the initiative ‘From biodiversity to reforestation’.

With the two beehives installed on our premises’ roof, we collected several pots of honey, which were then offered to employees. Each employee made a donation in exchange for their honeypot and the money collected was invested in two agroforestry projects selected by employees.

As a result, 300 trees have been planted in 2014, in addition to 211 that were planted in 2013.

Certification of the tree planting in Ghana and Morocco

Amadeus IT Pacific – Sydney – Activity Based Working
Activity Based Working (ABW) is a workplace strategy that provides employees with a set of choices to perform their work in the most suitable spaces depending on the range of needs from intense concentration and focus to informal meetings. The drivers for implementation at Amadeus Sydney were essentially the need to:

- Adapt to changes in the workforce.
- Address inefficiencies in the traditional use of office space that result in inefficient use of space since at any given point in time up to 30% of office desks may be unoccupied.
- Provide employees with more flexibility and the opportunity to work in a more environmentally sustainable manner.

Activity Based Working improves our environmental performance in various ways:

- Reduced workplace environmental footprint per person.
- Commuting is also improved since employees can optimise their travelling to perform their duties without the need of being physically present in the office.
- We also expect that the organisation becomes more agile and is able to absorb change and accommodate growth within a reduced footprint.

See ‘Workplace of the future’ p. 113
Environmental benefits of Amadeus solutions

The value proposition of Amadeus solutions is primarily based on increasing operational efficiencies for our customers, which often convert into:

- More productivity
- Reduced costs
- Better use of infrastructure
- Environmental benefits

From a quantitative point of view, our most important contribution to the sustainability of the industry and improvements in environmental performance is our investment in innovation, and how that innovation is implemented in the solutions offered to our customers.

The Amadeus continuous R&D investment in IT solutions is paying off and we are being able to deliver increased efficiencies and significant fuel and emission savings for customers. Some examples of environmental benefits of Amadeus’ solutions for airlines, airports, ground handlers and travel agencies follow.

Emissions saved for our airline customers exceed total emissions of Amadeus operations – Amadeus Altéa

As demonstrated in a joint study carried out with Finnair that analysed more than 40,000 Finnair flights, the Amadeus Altéa Departure-Control Flight Management (Altéa DC-FM) module has proven effective in facilitating significant fuel and emissions savings.

Altéa DC-FM automates aircraft load control and optimises every flight departure by analysing the passenger and cargo load more precisely and automatically defining the optimal aircraft load distribution. This helps optimise fuel for every flight departure. Our most prudent estimations point to a minimum of 100 tonnes of fuel and more than 315 tonnes of CO₂ emissions saved for Finnair on an annual basis.

Assuming that a similar level of savings is achieved for customers other than Finnair, the amount of fuel and CO₂ emissions saved by our DCS solution in 2014 would exceed the total emissions associated to Amadeus operations.

The benefits of the Altéa DC extend beyond airlines into other industry stakeholders. For example, Altéa DC is being implemented for centralised load control offices of airport ground handlers. Amadeus provides a fully automated solution for managing the weight and balance of all flights. The system automatically defines optimal load distribution, thereby optimising fuel requirements for airlines and increasing uplift capacity for aircraft.

See ‘Amadeus top 10 sites environmental performance’, p. 85
Contributing to an efficient airport management - Amadeus Sequence Manager

We are optimistic and confident that the expanding range of Amadeus Airport IT solutions are and will be bringing important environmental benefits for a range of stakeholders including the airport, airlines, travellers, airport municipality (reduced pollution) and society in general. Amadeus Airport Sequence Manager is a clear example of how our technology expertise and network of partners can deliver solutions that improve operational and environmental efficiencies.

The European Organisation for the Safety of Air Navigation (Eurocontrol) issued a study* about the benefits of implementing Collaborative Decision Making (CDM) at airports. CDM is a Eurocontrol initiative whose objective is to integrate airport operations into the air traffic management network. Airport CDM is about enhancing cooperation and coordination by sharing existing information and resources at an operational level between air traffic management, airlines, ground handlers, airports, and other service providers, resulting in improvements in resource usage, schedule maintenance, environmental performance, and flexibility in reacting to events.

Based on the conservative estimate that the implementation of CDM will reduce just one minute of taxi time per flight, the Eurocontrol study indicates a cost savings potential of over €120 million per annum, and a CO₂ reduction of around 250,000 tonnes per year for the European Civil Aviation Conference (ECAC) major airports. Furthermore, there would be other benefits in noise and air quality impacts, which are known major causes of constraint on airports and hence on the European Air Traffic Management System.

**Fuel savings estimations expected from CDM:**

- More than €120 million
- More than 250,000 t of CO₂ emissions

In 2014, Amadeus launched Airport Sequence Manager, a solution to help airports on their CDM initiatives. Amadeus Airport Sequence Manager uses a collaborative approach to optimise the flight departure process.

The solution relies on sophisticated sequencing algorithms to calculate the Target Start-Up Approval Time for each departing flight. This allows the aircraft to leave the stand at the last possible moment, reducing fuel burn, economic costs and environmental impact, and it enables better allocation of resources. Runway capacity can therefore be optimised at times of congestion, or de-icing processes taken into account during the winter season. As a collaborative tool, Amadeus Airport Sequence Manager creates a shared situational awareness among all airport partners.

Amadeus launched Airport Sequence Manager in collaboration with Munich Airport – one of the busiest European airports.


See ‘Airport IT’ p. 61
The environmental performance improvements provided by Amadeus solutions at airports are expanding to business operations beyond aircraft movements. At the time of closing this report, Innsbruck airport had just implemented Amadeus Airport Common Use Service (ACUS). ACUS allows Innsbruck’s airlines and ground handlers to leverage application virtualisation and cloud technology. The platform is hosted in Amadeus’ centralised data processing facility, eliminating the costly reliance on on-site IT infrastructure and reducing energy consumption, greenhouse gas emissions and costs.

Amadeus Japan: Carbon offsetting programme launched in cooperation with the Japanese Ministry of Economy, Trade and Industry and myclimate Japan

Beyond the environmental benefits of Amadeus IT solutions, we also foster environmental awareness and action, taking advantage of the contact that, one way or another, we have with more than 1 million passengers every day. As an example, we have launched a carbon offsetting initiative for the Japanese market that provides travellers the possibility to both know the CO₂ emissions released by their trips, as well as make a voluntary donation to invest in projects that reduce emissions by the same amount.

This initiative adds a new function to Amadeus e-Power, the Amadeus online booking engine for travel agencies that displays during the booking process the estimated carbon footprint of a flight as calculated by the International Civil Aviation Organization (ICAO), and encourages travellers to participate in carbon offsetting by purchasing carbon credits equivalent to the carbon footprint they will generate.

In order to purchase carbon credits, travellers will adopt a scheme called the ‘J-Credit System’, promoted by the Japanese government, in which the government certifies the amount of greenhouse gas reduced by activities such as the introduction of energy-saving equipment and forest management as carbon credits.

This business model allows carbon offsetting in travel agencies’ online booking websites powered by Amadeus e-Power. The certificate of carbon offset is issued by myclimate Japan to the participants of this donation.

The number of travellers who can be offered this offset option is significant, since the tool will be available to all Japanese travel agencies that are developing their online booking tool with Amadeus e-Power. We are therefore looking forward to seeing the results of this initiative in 2015 in terms of amounts of emissions offset.
6. Enviromental and social commitment_ Environmental sustainability

We are conscious that the environmental sustainability of our industry is a common objective for all industry stakeholders and that little can be achieved in isolation. In line with our business strategy, on the environmental front we take advantage of our technology, expertise and business network to make our contribution to industry sustainability. A good example of how we put this strategy into practice is our collaboration with the International Civil Aviation Organization (ICAO) regarding aviation carbon calculators.

In order to raise awareness of aviation carbon emissions and to foster prevention and mitigation actions, airlines, NGOs and other industry stakeholders launched aviation carbon calculators so that travellers can be aware of the CO₂ emissions released as a consequence of their trips. Two major obstacles to achieving this target are related to the subjectivity of estimating carbon emissions per passenger, and the ways and means by which the traveller is informed.

In this respect, Amadeus and the ICAO reached an agreement whereby Amadeus uses ICAO’s carbon calculator in our corporate booking tool, so that corporations and travellers can be informed during the booking process about the greenhouse gas emissions released on their trips. Regarding the issue of the subjectivity of estimating and allocating aircraft emissions to passengers, ICAO’s carbon calculator brings the benefits of neutrality, a global approach and the legitimacy required, since ICAO is the United Nations agency in charge of civil aviation.

In other cases, like in our cooperation with the World Travel and Tourism Council (WTTC), we contribute and learn through participation in various work streams associated with issues related to sustainability and subjects as diverse as discussing a common framework for travel industry non-financial reporting, or the specific interpretation and implications of the Intergovernmental Panel on Climate Change (IPCC) reports for the travel industry.

See ‘Amadeus industry relations’ p. 17
Climate change related risks and opportunities for Amadeus

Background
Greenhouse gas emissions and climate change are a principal concern in the travel industry, particularly due to the high energy intensity of means of transportation. On the other hand, some of the most vulnerable places in the world to climate change impacts are tourist destinations in developing countries, whose economies depend greatly on the jobs and income linked to tourism.

Most travel industry associations and organisations are addressing climate change as a matter of priority. For example, the International Air Transport Association (IATA), the World Travel and Tourism Council (WTTC) or the International Civil Aviation Organization (ICAO) have all fixed specific plans and targets for the reduction of emissions over the mid- and long-term. The achievement of these targets means, among other things, that the foundations of the travel industry as we know it today will need to be changed.

Amadeus is involved in the travel experience of close to 2 million passengers every day. We are therefore a significant player in the travel and tourism industry and, beyond the consideration of specific risks and opportunities linked to climate change, we acknowledge the right and obligation to contribute to the fight against climate change.

Risks and opportunities
We can classify the climate change related risks for Amadeus into the following categories:

1) Physical risks
Since Amadeus operates globally, the probability of physical risks affecting our operations is very high. We subclassify these risks into three categories:

i. Physical risks affecting the communities where we operate
Amadeus operates in 195 countries. The risk of climate change impacts and/or extreme weather events affecting any of the communities where we operate is therefore very high and the impact is also potentially very high. As part of our social responsibility efforts, Amadeus has built a global team of more than 80 Amadeus social responsibility representatives worldwide that, among other things, coordinate responses in case of adverse events occurring in the markets where we work.

ii. Physical risks affecting our travel providers and/or customers
The risks in this case are not as high as for the communities where we operate, and the impact tends also to be limited to very specific cases. As a prevention and mitigation measure, our 24 hour ‘Follow-the-Sun’ customer service is prepared to provide extra support in case of need.

iii. Physical risks affecting Amadeus operations
Amadeus operations rely on two basic kinds of infrastructure:
• Commercial and support organisations with 71 offices across the world
• The processing of data that is mainly carried out in our data processing centre in Germany

The probability of any severe event affecting any of our offices worldwide is relatively high, but fortunately mitigation of impact is facilitated by communication technology that in most cases permits uninterrupted customer service. On the other hand, our Risk & Compliance office manages directly all infrastructure related risks at our data processing centre, where the most strict prevention measures are implemented.

See ‘Social Commitment’ p. 79
See ‘Customer service’ p. 71
6. Environmental and social commitment_ Environmental sustainability

2) Regulatory risks
Since the Kyoto Protocol entered into force in 2005, many countries have introduced or are about to introduce climate change related regulation. A principal focus of these regulations is the reduction of greenhouse gas emissions, particularly of CO₂, as well as the promotion of renewable sources of energy. At the moment we identify two kinds of environmental regulations that may pose a risk and potentially an opportunity for Amadeus:

i. Carbon reporting regulations
It is becoming common for countries to promote the reporting of carbon emissions especially for corporations above a certain size. Amadeus can help corporations gather the data required for this kind of reporting. Should these regulations become too complex or heterogeneous they, may pose a risk to Amadeus since it will become costly and complex to help corporations report their emissions. For this reason, the Industry Affairs team is working with several stakeholders, including the European Union and leave as is ICAO to promote an industry standard methodology to estimate emissions related to travel.

ii. Regulations that impose charges on emissions and/or emissions reductions
The most important example of this kind of regulation affecting Amadeus is the implementation in the aviation sector of the EU Emissions Trading Scheme. The implementation of a regional emissions market in a global sector like aviation may create competitive and political disruptions. Therefore the main risks associated with these regulations are the uncertainty and the additional costs that, at least in the short term, this may mean for the industry. At the moment we do not expect a significant impact of these regulations in the short term for Amadeus, given the current relatively low cost of compliance with the scheme, which is unlikely to bring travel demand down, and also due to the geographical diversification of Amadeus’ business. On the other hand, in a context of increasing costs of using fossil fuels, any IT solution that includes in its value proposition a reduction of fuel consumption and emissions becomes more attractive to customers.

3) Reputational risks
Travellers and the general public are increasingly aware of climate change risks and expect environmentally responsible operations from companies. Even though Amadeus’ exposure to the general public is limited, we need to prioritise compliance with industry environmental standards to make sure that our performance excels.

The implementation of the Amadeus Environmental Management System provides a solid reference of our performance evolution and permits the easy identification of areas for improvement. Additionally, Amadeus has been included in external sustainability like the Dow Jones Sustainability Index (DJSI) and the Carbon Disclosure Project (CDP). These indices provide recognition to those companies that demonstrate a special commitment to sustainability indices.

The opportunities for Amadeus related to climate change are divided into two categories:

1) Opportunities for new products and services
As pointed out above, corporations are getting more and more involved in the reporting of emissions associated with their operations, including emissions linked to the business travel of employees. Taking advantage of the data and information processed by Amadeus in relation to the Distribution line of business Amadeus can offer solutions that display emissions during the booking process (currently available in the Amadeus corporate booking tool), compare alternatives for travel so that the traveller is informed about the most environmentally friendly alternative, provide post-trip reports to corporations so they can measure, report and follow up on their impacts and facilitate mitigation measures like carbon offsetting programmes.

2) Opportunities for a more attractive value proposition
Amadeus IT solutions generally improve efficiencies for our customers. These efficiencies translate in many cases into better environmental performance, particularly in relation to reduced fuel consumption and emissions for our travel provider customers. Examples of these solutions include Amadeus Altéa DC, implemented for airlines and ground handlers; Airport IT solutions such as Sequence Manager, which reduces the amount of time spent by ground movements and queuing of aircraft; and Amadeus Airport Common Use Service, which helps airports reduce energy costs, etc.
Amadeus and sustainability indices

Sustainability indices provide a valuable benchmark to evaluate how we compare to other companies and industries regarding sustainability performance. They also help identify areas for improvement and contribute to gaining visibility internally and externally about our performance.

Our strategy and clear position on key environmental topics have also permitted Amadeus to join and remain for now three consecutive years in the Dow Jones Sustainability Index (DJSI)*. The DJSI evaluates sustainability performance in the economic, social and environmental dimensions. Only the top 10% of scorers for each activity sector enter the index.

On the other hand, Amadeus was included for the first time in 2014 in the Carbon Performance Leadership Index of the CDP**. The CDP evaluates both the disclosure and transparency of information with a score that ranges from 0 to 100, and the performance with a score that ranges from E to A. Amadeus’ score in 2014 was 93 in the disclosure evaluation and an A in performance. Although we look back at our achievements in this area with pride, we are aware that there is much yet to be done and that the objective of environmental sustainability is a direction we are taking, rather than a destination. Therefore the job is never finished in this field and a critical component of our strategy is the search and implementation of continuous improvement.

2012
2013
2014

* The Dow Jones Sustainability Indices (DJSI), launched in 1999, are a family of indices evaluating the sustainability performance of the largest 2,500 companies listed on the Dow Jones Global Total Stock Market Index.

** The Carbon Disclosure Project (CDP) is an international, not-for-profit organisation providing the only global system for companies and cities to measure, disclose, manage and share environmental information.

***The RobecoSAM Sustainability Awards 2015 corresponds to 2014 data in the performance evaluation.
6.2. Social commitment
Amadeus’ social responsibility: a catalyst for change

At Amadeus we believe that our economic performance, together with our ability to contribute to sustainable development, are what will enable us to succeed. Our social responsibility plays a unique role in achieving this.

To support social development, we tap into the vast opportunities that the world’s travel sector has to offer. We involve our business, our people and our partners in the sector, to contribute to change through development projects, education and initiatives for the welfare of underserved communities – especially in the markets where we operate.
Amadeus’ strategy in social responsibility is to use the core strengths of our business and the opportunities in the global travel industry, in order to help alleviate widespread social challenges that our stakeholders identify and that we are best placed to answer.

Amadeus strategic framework

- **Umbrella objective**: To improve stakeholder value with a positive contribution to the society
- **Purpose**: To shape the future of travel
- **Vision**: To be the leading provider of technology solutions for the travel industry

Social responsibility strategy

- Advanced technologies applied to global travel
- Expertise and time of our people
- Influence, reach and networks of our business partners

Deployed in partnerships that can contribute significant improvement in social conditions among underserved communities

Stakeholders for social responsibility

- **Civil Society**: Human rights; poverty; building professional skills in the local communities; universal access to essential travel information
- **Employees**: Support and inclusion of vulnerable groups in our local markets
- **Customers**: Local skilled professionals; tools to meet commitment to society
- **Regulator; Travel bodies**: Human rights; poverty; equal access to essential travel information

Issues of interest for stakeholders

- **Civil Society**: Underserved communities
- **Employees**: Local skilled professionals; tools to meet commitment to society
- **Customers**: Local skilled professionals; tools to meet commitment to society
- **Regulator; Travel bodies**: Human rights; poverty; equal access to essential travel information

Amadeus deploying its core strengths to social development

Improved technologies to drive sustainable development

- Accessible, quality education
- Humanitarian support in our local communities

Technology for good

- Knowledge & Skills Transfer
- Community Support
The result: scope and impact of social projects with external partners in 2014

Once again, 140 projects and initiatives were carried out with measurable impact in 57 countries. All these initiatives were identified and developed in partnership with external social stakeholders, in the three core programme areas in which we deliver our commitment to society: Amadeus Technology for Good, Amadeus Knowledge & Skills Transfer and Amadeus Community Support programmes.

Output

- Projects in 57 countries
- 65% Amadeus organisations involved
- 15% of staff active
- Value of core business resources in multi-market projects: €1.84 million
- Cash donations to fund charity work in local communities €0.22 million

Impact

- Four Technology for Good projects
- 52 Knowledge & Skills Transfer projects
- 84 ongoing community support initiatives

Input

- €245,000 raised for UNICEF projects by 40,662 travellers using Amadeus Donation Engine
- 5,000 young people trained in travel reservation skills
- 6,700 volunteer hours dedicated to local communities

Visit the Amadeus Corporate Social Responsibility Map online, www.amadeus.com/csrmap
Amadeus Technology for Good Programme:
shaping the future through a sustained source of funding for development projects

Despite geopolitical and economic challenges, travel and tourism is an area of economic growth. International tourism went up by 4.7% in 2014. Destinations worldwide received some 1,138 million international tourists during this time, and there are indications that the trend is continuing*. It is this potential that the Amadeus Technology for Good programme has tapped into, to build a sustainable source of funding to answer a global human rights challenge – ensuring survival and welfare of the world’s most disadvantaged children.

Technology for Good involves the use of our technology to drive sustainable, social development initiatives. A year ago, under this programme, Amadeus, the United Nations International Children’s Emergency Fund (UNICEF) and Spanish airline Iberia, launched a global online donation initiative for the travel sector. Travellers could contribute towards the funding of UNICEF’s projects around the world, by making a micro donation when buying their tickets on any one of Iberia’s more than 40 country websites.

Amadeus is providing a donation engine that can be integrated with travel booking websites. This enables thousands of willing travellers around the world to donate to UNICEF projects for children.

Results obtained in Chad from January 2013-June 2014 *(includes contribution of IB.com and other corporate partners)*

- 600,000+ babies were vaccinated against diphtheria, tetanus, pertussis, tuberculosis, polio and measles
- 1,494 vaccinators were trained
- 242 solar refrigerators for vaccines were purchased for local health centres
- 0 cases of wild poliovirus were declared
- 9 cold chain rooms are under construction
- 17 vaccination campaigns were conducted

Chad is one of the world’s eight most critical countries where vaccination programmes are lacking. Before UNICEF’s initiative, two out of every three children had not received any vaccination. In 2011, Chad was the country with the second highest number of polio cases in the world.

6. Environmental Social commitment

Engaging the industry for unprecedented impact

The programme is now open to expansion. The latest addition of Finnair with its 37 country websites was a perfect illustration of why Amadeus is best placed to deliver a multi-market, multi-currency, technology solution of this nature. Deploying the Amadeus donation engine, which powers the online donation process, requires multiple skills: product management, developers, payment and integration specialists, e-commerce and airline IT, customer support and legal and communication specialists. It is their valuable input that builds and supports the programme.

Through the UNICEF programme, we can and are starting to engage key travel industry players in collaboration that is relevant to their business and that has potential to deliver major impact. Finnair decided to join the programme to bring fresh growth to their long-standing charity programme and incorporate a new digital approach, in line with their overall business strategy. As with Iberia, this too is a flagship social responsibility project for them.

The result of this programme is proof of the still unfulfilled potential of using travel and technology to boost social advancement. It further challenges us to build ever more innovative travel technology applications, ones that empower the travel sector to fulfil its transformative potential for good – to achieve socially profitable outcomes impossible to achieve by a single organisation alone.

Solutions to ensure that essential travel information is accessible

More than 15% of the world’s population live with some form of disability*. These include functional limitations from birth, illness, accident, or impairments due to aging, or even temporary disabilities. Or simply, users impacted by poor communication infrastructure in their regions. Further, international organisations and some regulators increasingly remind us that ‘advocating for and advancing universal access in travel and tourism is both a question of rights and a question of ethics’**. And that ‘increased accessibility in tourism benefits people with disabilities and special needs while entailing significant economic opportunities for the sector’***.

In shaping the future of travel, we believe that all travellers have the right to access essential information on their travel booking and itinerary. As a result, Amadeus has started to address this need by gradually enhancing its technology used by travel service providers to offer travellers online booking and airport self-service. Amadeus’ first goal is to achieve compliance, by end 2015, with the international standard WCAG 2.0 (Web Content Accessibility Guidelines) for Amadeus Internet Booking Engine, the world’s most widely-used airline internet booking engine, which powers over 100 airline websites worldwide. While this first effort responds to a regulatory requirement with limited geographic scope for some of our customers, Amadeus has chosen to extend the reach of the functionality to all airlines using its flagship internet booking engine, and hence to benefit travellers all over the world.

* Source: World Health Organisation
** Source: World Travel and Tourism Council
*** Source: United Nations World Tourism Organisation

From left: Pekka Vauramo, CEO of Finnair, Marja-Riitta Ketola, Executive Director of the Finnish Committee for UNICEF, and Luis Maroto, President & CEO of Amadeus

'Thanks to the support of Iberia, Amadeus, and other donors around the world, UNICEF has been able to strengthen its programme in Chad, vaccinating more than 600,000 infants against diphtheria, tetanus, polio, whooping cough, tuberculosis, and measles. Commitment by private enterprise is essential for the accomplishment of UNICEF’s mission, which is to make real changes to the lives of millions of children.’ – UNICEF

'We are really proud to have been pioneers in a project like this, with the aim of improving living conditions for children all over the world. We hope that in 2015 our customers will continue to support this campaign, and we can move a step closer to the eradication of these diseases.’ – IBERIA
Amadeus solutions that are already accessible for travellers with disabilities are in the airport environment. They include the Amadeus Airport Flight Display System where content and control of presentation (font size, structure, colours) can be customised to meet accessibility requirements. Or, visual and audio paging is available as an alternative for communication. The Amadeus Reduced Passenger Mobility solution is another example that draws information from Amadeus Altéa Departure Control to user ground handlers, to notify them of special services needed by, for example, a physically impaired traveller. Our ambition is to gradually extend this accessibility to other Amadeus technology.

Social Responsibility Global Contest
From 12 May to 15 June 2014, a Global Contest engaged Amadeus people around the world in determining what could be our next global project in social responsibility and 49 ideas were shortlisted. Second place went to the idea: ‘Accessible travel technology for visually impaired people’. The team dedicated the cash prize to promoting and creating awareness of an accessible hotel search and booking engine for the visually impaired. The engine is run by a specialised travel agency, Ilunion Viajes, owned by the Spanish national association for the blind.

Amadeus Knowledge & Skills Transfer Programme
Bridging the gap between mainstream education and what the job market requires
Recent research carried out by the World Travel and Tourism Council has quantified the sheer scale of the human resource challenge in travel and tourism and the potential impact of the skill shortage on the 2024 projections for the sector. Over 14 million jobs globally are at risk in the travel and tourism industry, if governments and private sector companies do not act now to address the talent shortage in the industry*.

Amadeus Knowledge & Skills Transfer Programme seeks to close the gap between mainstream education curricula and what the job market requires of new graduates, first by educating the future workforce about the career opportunities in the sector, and second, by providing the necessary training and skills.

In 2014, our collaboration with more than 100 universities or training centre partners resulted in over 5,000 young people benefitting from the Amadeus Knowledge & Skills Transfer Programme, receiving either training in travel reservations, general business management and mentoring, or certifications in the Amadeus System.

Amadeus collaboration in Europe
Of all the Amadeus regions, Central, Southern and Eastern Europe (CESE) has the largest amount of collaborative programmes with educational institutions. The projects range from digital inclusion in rural Turkey, thanks to computer donations to schools, through to the introduction of travel and tourism in secondary school curriculums in Croatia and global travel distribution skills in vocational institutes and universities. For instance in Latvia, approximately 300 students benefit annually from the partnerships between Amadeus and nine educational institutions to teach travel industry-related skills. In Cyprus, the Cyprus Higher Hotel Institute, the Ministry of Labour and Social Insurance and Amadeus’ country office have joined forces to provide customised training to unemployed people.

* World Travel and Tourism Council, Global travel and issues for the travel and tourism sector published 11 February 2015
To support training online for disadvantaged communities, in 2014, Amadeus offices donated 305 PCs, raising the total to 2,076 computers donated since the inception of our global PC Bank Programme in 2010.
Amadeus Community Support Programme

While progress is being made in tackling global poverty, new challenges including the economic crisis, war or epidemics threaten to undermine the poverty reduction efforts.

It is against this backdrop that Amadeus carries out business in 195 countries, with a worldwide team of more than 13,200 people. These countries represent diverse economies, living standards and opportunities. Amadeus’ Community Support Programme, which includes projects carried out jointly with local non-governmental organisations (NGOs), to benefit the less fortunate, contributes towards alleviating cases of poverty in some of the local communities.

Through sports for charity, market fundraising and cash donation, Amadeus staff funded the work of over 60 NGOs among the less fortunate in the Americas, Africa, Asia and Europe. Staff also dedicated over 6,700 hours to volunteering in the local communities.

Latin America

This year, our region-wide programme that brings enthusiastic volunteers from Amadeus and its customer companies to help the communities during one day, the Amadeus Volunteer Day in Latin America, was recognised externally in El Mensajero’s Bitacora Awards. This external credit was well received by the 315 Amadeus employees and staff from 12 customers that were out in the community on 1 September 2014.

North America

Amadeus subsidiary Newmarket International has been actively making a positive contribution to the community in North America. Through payroll giving, fundraisers and cash donations, Newmarket International funded over 60 charities in 2014, and the staff dedicated over 1,000 hours of paid work time to volunteering in the local communities.

Amadeus employees in Miami donated 300 pairs of shoes to Soles4Souls to advance its anti-poverty mission.
6. Environmental Social commitment

Asia-Pacific

1. & 2. 450 children from 15 NGO-supported schools in Bangalore participated in the Secure Giving initiative of Concern India Foundation.

3. Amadeus Bangkok staff support Friends International, a not-for-profit that works towards a child-safe network in Cambodia.

4. Amadeus Malaysia staff equip children for school at Malaysia Sithamani Orphanage

Europe

In Western Europe, funds raised through sports and charity markets along with volunteer time were dedicated to supporting local causes, including cancer associations, inclusion of disabled people, restauration of tourism sites in Italy and families with little resources. Country offices involved included UK, Italy, France, Spain and Benelux countries.

Employees from Amadeus Spain, Morocco and Madrid raised funds in the Rock’n’Roll marathon for a not-for-profit in India, Magic Bus, that supports underserved children and the national cancer association in Spain.

Amadeus staff in the UK organised a charity market to support the local brain cancer association, Braintrust.

300 kilometres were clocked up by our 20 sporty Amadeus champions who participated in the 24 hour sports challenge in Nice to support disabilities in the workplace.
Africa
In Sub-Saharan Africa, Amadeus focuses on child welfare, working with local organisations such as the Angel Centre for orphans in Kenya or St Laurence Children’s Haven in South Africa. In West Africa, the focus is on women’s empowerment initiatives such as Nebeday in Senegal. Nebeday builds capacities for participatory management of natural resources by and for local communities.

Growing our social contribution: 2015-2018 Plan
While we are achieving measurable and positive results in our external social responsibility programme, there is still significant margin to improve and grow our contribution. In 2014, a cross-functioning senior management team across Amadeus worked together to analyse, develop and propose a plan that will evolve our strategy further, between 2015 and 2018. The three-year plan will evolve the current management structure, mechanisms and tools to embed social responsibility in the organisation, grow staff involvement, raise social responsibility skills across the employee base and sustain project work. As key stakeholders, Amadeus employees were also involved in the process. Through a global contest, they contributed ideas for new signature programmes that can leverage Amadeus core strengths and resources to provide solutions to relevant social needs in the marketplace.

We have achieved measurable and positive results in our external social responsibility programme

Amadeus East Africa bringing a much needed contribution to support Angels Centre, an abandoned children’s home in Kenya.

Global Brand team representative for the idea to develop a booking engine for visually impaired people.

The representative behind the idea for a global partnership with a disaster relief organisation.

Bangkok representative for the idea to support a child-safe advocacy network in tourism regions.