



REPORT | MARCH 10, 2017

# Airbnb: Helping travel grow greener



## Introduction.

Airbnb is a people-to-people platform connecting hosts and guests across 65,000 cities in 190+ countries. Since our founding in 2008, 160 million guests have arrived at Airbnb listings around the world and the number of homes shared on our platform has reached 3 million—more than the combined rooms of the three largest hotel chains.<sup>1</sup> While the traditional tourism industry adopts greener practices, Airbnb's growth actually has been driven, in part, by interest in home sharing as a sustainable option for travel.

# 72%

of Airbnb guests say the environmental benefits of home sharing were of at least some importance in their choice of Airbnb<sup>2</sup>

Launched less than a decade ago, Airbnb is both a reflection of and a response to three converging global trends:

### **Growing concern about climate change, especially among younger adults.**

The years from 2001 through 2016 have been among the hottest years ever recorded, and the past three years (2014 through 2016) have been the hottest ever. Among countries that are top polluters, the highest concern about climate change and support for taking eco-friendly measures such as limiting greenhouse emissions comes from the youngest adults<sup>3</sup>.

### **An urban population boom making it easier to share resources.**

In 1950, 83 cities around the world had populations of 1 million or more; in 2015, 500 cities had populations of 1 million or more. The 21st century is the first century when more people live in cities than don't, and three-quarters of the global population is expected to live in cities by 2050<sup>4</sup>.

### **Surging interest in travel.**

Travel and tourism now account for about 10 percent of global GDP and 1 in every 11 jobs. International tourist arrivals have increased from 25 million in 1950 to 1.24 billion in 2016, 46 million more than in 2015<sup>5</sup>. Americans are traveling abroad in historic numbers, while in Europe, 3 million students have taken the opportunity to study in another European country. Millennials in the US and UK rank travel higher in importance than buying a home.

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<sup>1</sup> Based on data compiled by [STR, Inc.](#)

<sup>2</sup> 2016 Airbnb Annual Compact Survey

<sup>3</sup> [ABC News/Washington Post](#) poll, November 2015; Pew Research Center [Spring 2015 Global Attitudes Survey](#)

<sup>4</sup> [New York Times](#), February 17, 2017

<sup>5</sup> [UNWTO](#)



These trends are driving interest in the “sharing” or “collaborative” economy overall, including Airbnb. Among European consumers, 52 percent say they take part in the collaborative economy because it’s good for the environment.<sup>6</sup> In the US, 76 percent agree that the sharing economy is better for the environment.<sup>7</sup> Among Airbnb’s guest community, nearly 3 in 4—the aforementioned 72 percent—say the environmental benefits of home sharing played a role in their choice to travel on our platform, a statistic that’s even more potent given our network effect. Airbnb’s guest arrivals have doubled year over year since 2014, from nearly 17 million in 2014 to 40 million in 2015 to 80 million in 2016, and will continue to grow in 2017.



In 2014, Airbnb engaged Cleantech Group to conduct an analysis of how the environmental impact of stays at Airbnb listings compare to that of stays at traditional accommodations.<sup>8</sup> The firm found that the environmental impact of stays at Airbnb properties is significantly lower than that of stays traditional accommodations across the impact categories analyzed.

Based on the model provided by Cleantech Group, our 2017 study also finds that significantly less energy and water is used, and fewer greenhouse gases are emitted, when guests use Airbnb. For example, Airbnb guests in Europe during the 2016 calendar year achieved energy savings equivalent to 566,000 homes and reduced water usage equal to 9,000 Olympic-sized swimming pools by staying in Airbnb listings instead of staying in hotels.<sup>9</sup> Compared to a similar number of guest nights in hotels, by staying in Airbnb listings in North America during the same

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<sup>6</sup> [PwC](#), Assessing the size and presence of the collaborative economy in Eur

<sup>7</sup> [PwC](#), Consumer Intelligence Report on The Sharing Economy, 2015

<sup>8</sup> Cleantech Group’s findings were based on an analysis of public sources and proprietary Airbnb data, including survey responses from over 8,000 Airbnb guests and hosts and focused on five impact areas: a) energy and greenhouse gas impact, b) water impacts, c) waste impacts, d) chemical impacts, a) induced travel impacts. See Methodology for details.

<sup>9</sup> See Methodology for conversion bases.

time period, Airbnb guest stays resulted in lower greenhouse gas emissions equal to that of 228,000 cars and waste reduction of 41,300 tons.<sup>10</sup>

In addition to these savings and reductions, the Airbnb community is taking proactive steps to **make listings greener**, to **partner with policymakers and NGOs to promote sustainable travel**, and to **create new offerings that introduce sustainability** not only into where you stay, but what you do.

## Making listings greener.



At base, home sharing promotes more efficient use of existing resources and is a more environmentally sustainable way to travel than traditional accommodations. By choosing Airbnb instead of hotels during the 2016 calendar year, Airbnb guests across North America and Europe, and specifically within the UK and in London, produced an estimated:

	London	UK	Europe	North America
Energy savings equivalent of	30,000 homes	60,000 homes	566,000 homes	309,000 homes
Water reduction equivalent of <sup>11</sup>	480 Olympic-sized pools	960 Olympic-sized pools	9,000 Olympic-sized pools	1,800 Olympic-sized pools
Reduced greenhouse gas emissions equivalent of	87,000 cars	175,000 cars	1.6 million cars	228,000 cars
Waste reduction of	Up to 4,300 tons	Up to 8,700 tons	Up to 81,200 tons	Up to 41,300 tons

<sup>10</sup> See Methodology for conversion bases.

<sup>11</sup> See Methodology for conversion bases.

Even as 72 percent of Airbnb’s guests use the platform to travel more sustainably, our hosts are proactively making their listings greener by embracing environmentally conscious products and services:

	<b>London</b>	<b>UK</b>	<b>Europe</b>	<b>North America</b>
<b>Hosts who incorporate environmentally friendly practices in their hosting</b>	96%	96%	94%	94%
<b>Hosts who provide recycling facilities for guests</b>	74%	76%	62%	75%
<b>Hosts who provide information on public transit</b>	86%	80%	69%	59%
<b>Hosts who provide “green” cleaning products</b>	34%	37%	37%	50%

At Airbnb, we also help educate our host and guest community about sustainable travel practices as opportunities and needs arise. In Cape Town, South Africa, today, we’re working with a water management consultant to help our hosts learn and teach their guests about the current water shortage, restrictions on water use and water-saving techniques. During the 2016 Summer Games in Rio de Janeiro, we partnered with the UN Environment Programme to share “Green Passport” information and materials with guests, encouraging them to be more environmentally responsible during their stay.

In North America, we’re providing our hosts with access to clean-tech and smart-home services to help them make their listings friendlier to the environment. Our new partnership with Vivint Smart Home gives hosts access to Vivint’s thermostat management system, which works with smart devices throughout the home to determine when guests leave the listing, then automatically adjust the temperature to conserve energy while guests are out exploring. Our partnership with SolarCity, announced in fall 2016, makes it easier and cheaper for hosts and guests to power their homes with solar panels.

Airbnb is pleased to regularly be included in global research consultancy Cleantech Group’s [Global Cleantech 100](#) ranking of companies around the world judged to “represent the most innovative and promising ideas in cleantech and that are best positioned to solve tomorrow’s clean technology challenges.”



## Partnering with policymakers and NGOs.

As tourism in general, and tourism around major events in particular, accounts for a growing share of cities' and countries' economic models, Airbnb works with local governments and NGO partners to help communities thoughtfully scale up their accommodations using existing resources: people's homes.



In cities with historic districts, we are implementing policies that focus Airbnb listings outside those cherished areas, including Barcelona's Old City and New Orleans' French Quarter. At the UN Habitat III summit in Quito, Ecuador, in fall 2016, we [published an open letter](#) stating our support for the New Urban Agenda and detailing our commitment to sustainable urban development that puts communities first.

We also partner with NGOs on educational initiatives. In Sydney, we have joined forces with the "world's most famous house," the Sydney Opera House, to highlight the iconic building's [globally recognized sustainable design](#), educate visitors about how Opera House employees live the mission through sustainable lifestyles, and explain how visitors can adopt similar practices themselves.

During the 2016 Rio de Janeiro Games, we partnered with the UN Environment Programme to share sustainable tourism tips with the Airbnb community and to promote UNEP's "Green Passport" campaign. We're pleased to note that our partnership with UNEP, the leading global environmental authority that sets the world's environmental agenda, was recently extended.

**257**

**new hotels Rio de Janeiro would have needed to build to accommodate visitors for the 2016 Summer Games; instead, visitors used Airbnb<sup>12</sup>**

**17%**

**of Rio Games visitors found accommodations through Airbnb<sup>13</sup>**

Airbnb's unique offer to local authorities, the rapid scaling of accommodations to help cities capitalize on tourist influxes for major events, is among the most satisfying work we do. By providing temporary housing for thousands of visitors, governments can avoid building permanent infrastructures, which can further tax the environment. Net benefits include reducing the amount of materials used in construction, their associated emissions, and the ongoing burdens of permanent structures, which are likely to become underutilized as soon as the event is over.

Since our founding in 2008, Airbnb has worked with local policymakers and event organizers to help cities more sustainably scale up accommodations for US presidential nominating conventions, the FIFA World Cup, Pope Francis' visit to Philadelphia in 2015 and the 2016 Summer Games in Rio de Janeiro, among countless other events. The 2016 Games marked the first time Airbnb officially brought home sharing to the world's largest sporting event as the Games' "official alternative accommodations supplier."

While research is only just beginning to uncover the full environmental effects of home sharing as a solution to this particular need, a recent study by the World Economic Forum and the Massachusetts Institute of Technology, using Airbnb data, showed that over the course of the Rio Games, 48,000 Airbnb listings housed 85,000 of the city's estimated 500,000 visitors. Many of these listings were created in the run-up to the Games. The study's authors found that Rio would have needed to build 257 hotels to accommodate that many visitors.

Airbnb is excited to partner with Korea's Gangwon Province to boost tourism as the state prepares for the upcoming Winter Olympics in PyeongChang. We currently offer more than 1,000 listings in Gangwon, and through our agreement with the province, Airbnb will expand our listings through our platform over the coming year.

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<sup>12</sup> [World Economic Forum](#), Understanding the Sharing Economy, 2016

<sup>13</sup> Airbnb

## New offerings.

Our new and expanding series of eco-themed Airbnb Experiences offered through the Airbnb app means guests can act more sustainably not only in terms of where you stay, but what you do—and going forward after your Experience, in how you live.

Launched in November 2016, Airbnb Experiences are handcrafted activities for small groups of guests, designed and led by local experts. Experiences offer unprecedented access and deep insights into communities and places you wouldn't otherwise come across. A growing roster of Experiences focus on sustainable living, particularly in cities. Many are being created in partnership with local nonprofits, with 100 percent of the profits going directly to benefit the cause. These Social Impact Experiences are [tagged with a blue ribbon](#) on the Airbnb website and app.

In **London**, the co-founder of London's Urban Bees [shows guests how](#) bees actually can thrive in cities with some human help, provides a tour of urban hives, and treats guests to a tasting of honey from various hives across the city.

Guests of the [“Farm to Table Fermentation Tour”](#) get a close-up of **San Francisco's** revolutionary NOMADgardens roaming urban garden, learn about fermentation in a hands-on workshop, and discuss ways to optimize city growing with local gardeners and nutritionists.

The “Harlem Grown + FoodCorps Experience” spotlights the challenges residents of **New York City's Harlem** face in finding fresh produce and healthy food. Guests are treated to a walk through Harlem to a thriving urban farm, where they roll up their sleeves to help.

In **Paris**, another organization that seeks to make sustainable and healthy food available, the Association Fauve, co-hosts our [“Sustainable Cooking in Paris” Experience](#) in which guests design a seasonal, affordable menu, buy the food, and cook it using French techniques.

In **Cape Town**, our [“Ocean Advocate” Experience](#) treats guests to a behind-the scenes look at a local aquarium with a marine conservationist, a coastline walk and clean-up, and the chance to volunteer in a coastal bird conservation facility.

In **San Francisco**, a US Coast Guard-licensed captain [takes guests sailing](#) around San Francisco Bay, stopping at a unique maritime co-op community in Sausalito to meet some of its members aboard their houseboats and learn about sustainable living.



The [“Mountainside Wasabi Patch” Experience](#), based in **Tokyo’s Okutama region**, gives guests a chance to learn about how wasabi is grown, witness the revival of a once-abandoned wasabi patch, and explore the surrounding forest.

In **Florence**, the head of volunteers for the Fondazione Angeli del Bello, which cultivates the city’s hidden and abandoned green spaces, takes guests on a [walking—and working!—tour](#) of one of the city’s most beautiful unknown rose gardens with a spectacular view.

And in **Los Angeles**, sustainability-minded guests have the options of learning about urban gardens and city eco-strategies with the co-founder of [Community Healing Gardens](#), and learning how to repurpose discarded materials into STEM educational tools with the head of [Trash for Teaching](#).



Airbnb and Pantone’s [“Outside-In House”](#) in Clerkenwell celebrated Pantone’s 2017 Color of the Year, “Greenery,” with a listing and Experiences dedicated to the idea of living with nature.

## Methodology.

Data presented in this report is derived from two sources:

Data reported about the eco-conscious activities of our hosts (e.g., hosts who provide recycling, hosts who provide information on public transit, etc.) comes from Airbnb's most recent annual Compact Survey, which was administered in February 2017. Airbnb distributed this survey to hosts who had hosted at least one time during the calendar year 2016; the sample sizes per geography are:

Geographies	Number of respondents
London	743
UK	3,518
Europe	42,873
North America	16,176

To calculate the environmental impacts of traveling on Airbnb, we engaged with Cleantech Group, a consultancy that helps accelerate sustainable innovation, to conduct [a high-level analysis](#) in 2014 of how the impacts of stays at Airbnb properties compare to that of stays at more traditional accommodations. Cleantech Group's 2014 findings were based on an analysis of public sources and proprietary Airbnb data, including survey responses from over 8,000 Airbnb guests and hosts, and focused on five impact areas: a) energy and greenhouse gas impact, b) water impacts, c) waste impacts, d) chemical impacts, and e) induced travel impacts.

Cleantech Group's 2014 analysis provided a model for Airbnb's use in calculating updated findings of the environmental impacts of traveling on our platform. The model has direct application for the same geographies as in 2014: Europe and North America. We also use the Europe model for specific geographies within Europe—in this case, the UK and London.

For this study, we used the Cleantech model, number of nights booked in 2016, and total guest arrivals in 2016 to calculate the impacts for each of the four geographies of using Airbnb on reductions in energy, greenhouse gas emissions, water and waste using updated Airbnb data as of February 1, 2017. We used the following conversions:

MMBtu per household per year: **38**

Greenhouse gas emissions per average vehicle per year (Europe): **1.76**

Greenhouse gas emissions per average vehicle per year (North America): **4.75**

Liters of water in an Olympic-sized swimming pool: **2,498,371**