

## Middlebury Institute *of* International Studies at Monterey

## Sustainable Travel Guide

Useful for traveling to and from Monterey

## 1. Introduction to Sustainable Travel

Prioritizing modes of transport that are less harmful to our planet, such as cycling, walking, public transportation, and electric vehicles, have the potential to substantially reduce greenhouse gas emissions, which are a primary contributor to climate change. By opting for eco-friendly travel options, individuals like you can play a crucial role in mitigating the adverse effects of climate change.

This not only helps in preserving the environment for future generations but also promotes healthier living conditions today! Embracing sustainable travel is a vital step towards a greener, more responsible way of moving worldwide.

## 2. Greenhouse Gas Emissions by Travel Mode

#### **Bicycling and Walking**

- Emissions: None. These modes of travel do not contribute to air pollution as they do not require fuel combustion.
- Health Benefits: Besides being emission-free, bicycling and walking contribute significantly to improved physical fitness and reduce exposure to air pollution for the traveler.

#### Public Transportation (Buses and Trains)

- Emissions: Public transportation, especially trains, have much lower emissions than cars or planes. For instance, an average passenger train emits about 0.06 kg of CO2 per passenger-kilometer.
- Benefits: Using public transportation can greatly reduce traffic congestion and lower per capita emissions, making it a more sustainable option.

#### Cars (Internal Combustion Engine [ICE] vs. Electric Vehicles [EVs])

- ICE Vehicle Emissions: Traditional gasoline-powered cars have high emissions, averaging 251 grams of CO2 per kilometer.
- EVs: Electric vehicles have significantly lower emissions. When powered by renewable energy, their environmental impact is further reduced. The lifecycle emissions of EVs can be up to 70% lower than those of ICE vehicles.

#### Air Travel

• High Emissions: Air travel is one of the most carbon-intensive modes of transportation. Short-haul flights emit approximately 285 grams of CO2 per passenger-kilometer, making it a less sustainable option.

#### The Future of Travel in California

California is paving the way for a sustainable future in transportation. By 2035, all new vehicles sold in the state must be zero-emission. This bold move underscores a significant shift towards reducing the environmental impact of personal transportation. It positions California as a leader in combating climate change, and the impact of this policy is expected to be a substantial reduction in greenhouse gas emissions. This transition aligns with the global efforts to mitigate the effects of climate change and represents a significant step towards a more sustainable and environmentally responsible future in travel.

## 3. Public Transit Opportunities in Monterey, California

#### Sustainable Travel Tips for Visitors from Salinas, Seaside, and Marina:

- **Public Transportation**: Utilizing the Monterey-Salinas Transit (MST) can be a sustainable and cost-effective travel method. Although it might take longer than driving, it's a greener choice. Plan your trip using the MST website or app to find the most efficient routes.
- **Carpooling:** For those driving from nearby cities, carpooling reduces the number of vehicles on the road, decreasing overall emissions. Carpooling apps or community groups can be used to find travel buddies.
- **Bicycling**: Biking from nearby cities to Monterey can be an exhilarating and eco-friendly experience for the more adventurous. Plan your route and check the weather beforehand.

#### Shopping in Seaside from Monterey:

Bus Routes: The MST provides routes that connect Monterey to various shopping destinations in Seaside. Check the latest schedules and routes to plan your trip.
Biking: For those who prefer cycling, bike-friendly routes connect Monterey and Seaside.
This option is sustainable and allows you to enjoy the scenic views along the coast.

• Electric Vehicles (EVs): If you own an EV, consider driving to Seaside for shopping. EVs have a lower environmental impact than traditional gasoline vehicles, and there are several charging stations in both Monterey and Seaside.

While each method of transportation has pros and cons, they offer sustainable alternatives to single-occupancy vehicle travel and contribute to reducing carbon emissions.

### 4. Hotels: The Best and Worst in Terms of Sustainability

The following tables come from a <u>Brighter Planet report</u>, which used proprietary information and greenhouse gas emissions data from over 46,000 hotels. Key findings include:

• Energy and carbon per room-night vary more than tenfold among US hotels. The dirtiest quarter of hotels is responsible for more than half of the lodging industry's energy and carbon impact, while the cleanest quarter represents just 7%.

• Hotel chains differ markedly in efficiency. Red Carpet Inns, Travelodge, and Scottish Inns took top rankings for budget establishments. At the same time, Four Points Sheraton, Disney Parks and Resorts, and Marriott Residence Inn led the efficiency rankings for upscale hotels. Vagabond Inns, Red Lion Hotels, and Howard Johnson were efficiency leaders among midrange properties.

• Hotels within the same chain also differ markedly in efficiency. For example, in Nashville, Tennessee, estimated energy and carbon per room night varied by a factor of two between the most and least efficient Holiday Inn Express.

• Budget hotels are generally more efficient, but footprint reduction opportunities exist at every price point. The average upscale hotel uses 25% more energy per room night than the



average budget hotel. Still, efficiency varies enormously within service segments, and most upscale hotels are cleaner than the dirtiest budget establishments.

• Hotel sustainability shows dramatic geographic variation. On energy efficiency, Arkansas, Tennessee, and Alabama scored top ranks while Minnesota and Wisconsin were least efficient; for carbon emissions, California polluted the least per room-night while the Upper Midwest was dirtiest.

• **Travel and sustainability managers can reduce footprints without cutting travel** and dramatically improve the accuracy of sustainability reporting by accounting for efficiency variability instead of assuming all hotel rooms are equal.

• Five key drivers can be used to predict hotel efficiency. Square footage per room, local climate, hotel amenities, energy sources, and electric grid cleanliness account for enormous variations in impact per room night. These drivers differ in their relative influence on efficiency.

• Hotels are becoming less efficient. Modern hotels use significantly more energy per room night than their older-vintage counterparts, and their energy is dirtier. A recent surge in interest in programs like LEED and Energy Star has the potential to reverse the trend.

• LEED and Energy Star metrics fall short in lodging industry sustainability accounting because they fail to consider the number of rooms in a hotel. Measuring hotel energy use and emissions per room night rather than per square foot is more relevant and actionable for business travel managers.

Rank	Chain	Energy efficiency (MJ/room- night)	Carbon efficiency (kg CO2e/room- night	Service Segment	Rank within Segment
1	Vagabond Inns	191	14	Midrange	1
2	Red Lion Hotels & Inns	205	18	Midrange	2
3	Red Carpet Inns	188	22	Budget	1
4	Travelodge	191	22	Budget	2
5	Scottish Inns	184	23	Budget	3
6	America's Best Inns & Suites	188	24	Budget	4
7	Shilo Inns & Resorts	224	19	Midrange	3
8	Knights Inns	189	24	Budget	5

#### **Top Ten Budget/Midrange Hotels**

9	Howard Johnson	198	23	Midrange	4
10	Rodeway Inn	203	23	Budget	6

## Top 5 Upscale Hotels

Rank	Chain	Energy efficiency (MJ/room- night)	Carbon efficiency (kg CO2e/room- night	Service Segment	Rank within Segment
33	Four Points Hotels by Sheraton	229	26	Upscale	1
38	Walt Disney Parks & Resorts	228	28	Upscale	2
42	Residence Inn by Marriott	231	28	Upscale	3
47	Courtyard by Marriott	236	28	Upscale	4
48	Wyndham Hotels and Resorts	238	28	Upscale	5

#### **Bottom 15 Hotels**

Rank	Chain	Energy efficiency (MJ/room- night)	Carbon efficiency (kg CO2e/room- night	Service Segment	Rank within Segment
61	Holiday Inn Select Hotels	244	32	Midrange	22
62	Country Inns & Suites by Carlson	245	32	Midrange	23
63	Hilton Worldwide	267	31	Upscale	15
64	Sheraton Hotels & Resorts	267	31	Upscale	16
65	Hyatt Hotels Worldwide	273	31	Upscale	17
66	InterContinental Hotels Group	276	32	Upscale	18

67	Drury Inns	249	37	Midrange	24
68	Marriott International	280	33	Upscale	19
69	Omni Hotels	288	32	Upscale	20
70	The Ritz-Carlton Hotels	287	33	Upscale	21
71	Westin Hotels & Resorts	286	34	Upscale	22
72	Embassy Suites Hotels	283	35	Upscale	23
73	Renaissance Hotels & Resorts	291	34	Upscale	24
74	American International	287	38	Midrange	25
75	JW Marriott Hotels & Resorts	309	38	Upscale	25

# 5. Car Rental Companies: The Best and Worst in Terms of Sustainability

What role do rental agencies play in sustainable transportation?

In 2022, Hertz signed a \$4.2 billion deal to purchase 100,000 Tesla EVs after coming out of bankruptcy and reorganizing its company structure post-pandemic. According to the senior vice president, Jeff Nieman, Hertz anticipated that 30% of its rental fleet would be electric by the end of 2024. This quazi-commitment has set off a race among rental car agencies; other major rental companies such as Enterprise Holdings and Avis Budget have also started incorporating EVs into their fleets.

However, the rental company has recently turned back to gas-powered vehicles and is in the process of selling over 20,000 of its EVs, including Teslas. Market analysis indicated that the used-EV market is less profitable than many companies thought, and the rapid depreciation of used-battery value is a much larger factor than anticipated. That said, many rental companies still have some EVs in their fleet, and most have a variety of hybrid, plug-in hybrid, and gas-efficient vehicles as well. Before renting a vehicle, consider the public transportation situation in the place you are visiting—chances are, you might not even need to rent a car to get around, especially if you're visiting a large metropolitan area. If you decide that a rental car is really necessary, look for gas-efficient car models (those that get at least 30 miles per gallon), hybrid models, or even EVs.

Larger rental car companies are more likely to have wider varieties within their fleets, so going with the big names is not a bad idea. These include Hertz, Avis, Budget, Europcar, and Sixt. That said, different companies vary in their consumer base: "Hertz has a higher share of leisure customers than Europcar, which is more focused on the corporate market. Sixt focuses on renting higher-priced vehicles to premium users, while around 60% of the vehicles in Avis Budget's fleet have sticker prices in the \$20,000-\$50,000 range" (Grant 2023; <u>BloombergNEF</u>)

#### 6. Airlines: Best and Worst in Terms of Sustainability

Sustainability in the airline industry is increasingly becoming a focal point for consumers and companies, with various airlines taking significant steps to reduce their environmental impact. The differentiation between the best and worst airlines in terms of sustainability largely depends on their efforts in fuel efficiency, plastic and single-use items reduction, waste management, and overall sustainability initiatives.

#### **Best Airlines for Sustainability:**

- KLM Royal Dutch Airlines: KLM is highly regarded for its comprehensive approach to environmental impact reduction. Since 2008, KLM's climate action plan aims to reduce its total carbon footprint by 15% by 2030 compared to 2005 levels. They have been consistently ranked in the top three of the Dow Jones Sustainability Index in the airline category for the past 15 years. KLM has made strides in using sustainable aviation fuel, including biofuel from organic waste streams. Notably, they launched a "Fly Responsibly" campaign, encouraging customers to consider planet-friendly travel alternatives, such as trains or virtual meetings (LeafScore).
- Alaska Airlines: This airline is known for its fuel efficiency and environmental research initiatives. It has led the U.S. airlines on the Dow Jones Sustainability Index for three consecutive years. Alaska Airlines maximizes fuel efficiency through technologies like split scimitar winglets and RNP navigation, leading to significant emission reductions.

They have also made history with biofuel flights and initiatives to reduce reliance on paper products and compost food waste (LeafScore).

• Xiamen Airlines: Xiamen Airlines aligns itself with the United Nations Sustainable Development Goals for environmental protection. They have implemented numerous energy conservation and fuel efficiency programs, resulting in significant fuel and carbon emissions savings. The airline also seeks to raise environmental awareness among passengers through themed flights (LeafScore).

#### Airlines With Room for Improvement in Sustainability (2022 Data):

• European Airline Groups: A Greenpeace report highlighted that major European airlines like Lufthansa, Air France-KLM, IAG (including British Airways and Iberia), Ryanair, easyJet, SAS, and TAP Air Portugal have not taken sufficient measures to reduce their CO2 emissions in alignment with the Paris Agreement. Many of these airlines rely on solutions like carbon offsetting and sustainable aviation fuels (SAF), which have limited effectiveness. The report criticizes these airlines for not having clear commitments to reduce flights or fully decarbonize by 2040.

The contrast in sustainability practices among these airlines reflects the broader challenges and varied approaches within the airline industry regarding environmental responsibility. While some airlines are making significant strides in reducing their environmental impact, others still rely on less effective measures and face criticism for inadequate action on climate change.

- Airlines with Older Fleets: Airlines that operate older fleets generally have a higher environmental impact. Older aircraft are less fuel-efficient and contribute to higher emissions per passenger-kilometer. These airlines often lag in adopting newer, greener technologies.
- Airlines Lacking Efficient Practices: Some airlines have not implemented comprehensive sustainability practices. This can include a lack of initiatives to reduce plastic and single-use items, insufficient recycling programs, and limited investment in sustainable fuels or efficient aircraft.

The airline industry's environmental impact is under increasing scrutiny in the current global context. The best-performing airlines in terms of sustainability are those that adopt more efficient planes, reduce waste, and proactively engage in broader sustainability initiatives, such as investing in sustainable aviation fuels and supporting carbon offset programs. Conversely, airlines with older fleets and less efficient practices face growing pressure to improve their sustainability performance to meet both regulatory standards and consumer expectations.

It's essential to note that the information on the best and worst airlines regarding sustainability is dynamic and subject to change based on the latest reports and industry developments. Consumers interested in sustainable travel should regularly check for updated information and choose airlines that align with their environmental values.

#### 5. Conclusion

In conclusion, the role of individual choices in reducing transportation-related emissions is pivotal. Individuals can significantly lower their carbon footprint by opting for more sustainable travel methods such as public transportation, cycling, and walking. Additionally, efficient driving and regular car maintenance for those who use cars can greatly enhance fuel efficiency. Regarding air travel, choosing airlines committed to sustainability, like KLM Royal Dutch Airlines, Alaska Airlines, and Xiamen Airlines, can support the industry's shift towards greener practices. However, being mindful of the environmental impact of less sustainable airlines is equally important. As consumers, supporting airlines with strong environmental commitments and reducing flight frequency where possible can make a substantial difference. Encouraging a shift towards more sustainable daily travel benefits the environment and promotes a healthier, more responsible lifestyle. We can collectively contribute to a more sustainable and eco-friendly future through conscious decisions in our everyday transportation choices.