

Project drawdown: 10 most impactful sustainability actions for the hotel industry



Project Drawdown is the world's leading resource for climate solutions, seeking to help the world to reach "Drawdown". This is the future point in time when levels of greenhouse gases (GHG) in the atmosphere stop climbing, and start to decline steadily. [A Top list](#) shows where the biggest impacts in GHG reductions can be made (all backed up by scientific research). Of this list, 10 actions are particularly relevant for the hospitality industry to support avoiding catastrophic warming of our atmosphere.

#1: [Reduced food waste](#): Ranked number one with the biggest impact when tackled globally. Around one third of all food produced globally is wasted or lost. This means that the emissions generated in the production phase were unnecessary and avoidable. Food waste we throw away with other waste, ends up in landfill emitting methane. This greenhouse gas is able to trap heat in our atmosphere 28 times stronger than CO₂ does. The simplest action is to sort food waste at the source and transform it in an anaerobic digester into clean energy and natural fertilizer, replacing the polluting options.

#2: [Health & education](#): When girls and young women have the ability to educate themselves, work and find a stable income thereby being empowered, fertility typically falls, which impacts the long-term population growth. The hospitality industry, often important for local employment, can support local communities by long-term job creation and job growth offerings, providing abilities to learn and to make informed healthy decisions, impacting local communities.

[#3: Plant-rich diets](#): Strong reduction in global meat and dairy consumption is one of the most impactful things individuals can do to cut their carbon footprint, reduce global warming, to resolve antimicrobial resistance and stop the rise of other food-related diseases (such as the Coronavirus), and prevent or reverse lifestyle diseases. Pro-active hotels will offer half of their menu items as plant-rich, showing CO2 emissions per item on the menu, thereby informing and nudging guests on their optimal choice, without always taking away the non-plant-based options. It is just presented differently. Hotels are ideal venues for guests to try new dietary options.

[#10: Distributed solar photovoltaics \(rooftops\)](#): Producing hyper-local, clean energy during daytime, for example on empty rooftops, show a visible way to produce clean energy and does not require land to place large scale solar fields. Even on cloudy days clean energy can be produced and co-power the hotel

[#18: LED Lighting](#): Of all lightbulbs currently available on the market, LED is the most efficient one wasting the smallest amount of heat compared to other ways of lighting. With increasing energy prices, replacing lights to LED, a shorter payback time is reached and less energy is needed to be generated.

[#24: Electric cars](#): Powering vehicles with electricity – locally and green produced – reduces the need for fossil fuels to generate electricity. Not every infrastructure around the world is already ready for this implementation, but good examples leading the way forward. Hotels can provide the charging infrastructure to guests and for their own electric vehicle pool.

[#28: Methane digesters](#): Large industrial scale anaerobic digesters turn collected food waste into methane gas and digestate, a natural fertilizer. Transportation of food waste by diesel trucks to these large-scale digesters still emits greenhouse gases. Another solution is to process the food waste next to the hotel in an on-site anaerobic digester, co-powering the hotel with local green energy and reducing the (costly) need to store and transport the food waste. Add to that the replacement of artificial (fossil based) fertilizer by using food waste-based fertilizer to grow food in the hotel's veggie gardens, hotels can reduce up to 5.11 KG CO2 per 1 KG food waste treated on-site. That is saving a lot more CO2 compared to asking guests to use their towel for a second time.

[#42: Recycling](#): Reducing the need for raw virgin materials leads to lower emissions. Separation of all waste streams at the source, allows the hotel industry to recycle their waste streams, and enable local businesses to produce new products from these materials. Food waste tends to have the lowest contaminations, because it is fairly clear to understand what waste belongs to what bin.

[#43: Biogas for cooking:](#) Shifting energy sources from fossil to renewables sources, lead to lower CO2 emissions. On-site anaerobic digesters produce biogas and digestate fertilizer from available food waste. Biogas, once cleaned can be mixed with natural gas to cook on, or can be transformed into green electricity and heat for hot water.

[#54: Nutrient management:](#) Overuse of chemical nitrogen fertilizers, reduce the soils ability to store carbon, and lead to arid soils, impacting future food security. Local regenerative food production, fertilized by natural fertilizer coming from the same food waste, on the field or in vertical farms can lead to lower emissions and stable food supply, providing guests with local dishes, and at the same time supporting local regenerative farmers.

More information on project drawdown:

<https://drawdown.org/news>