



THE  
**FOOTPRINT**  
COMPANY™

BUILDING SOLUTIONS FOR ONE PLANET



# Yoga Studio Sustainability



**Hot or Not:**  
Is hot yoga sustainable?

The Footprint Company has completed over 800 retail life cycle assessments. We have analysed the data to provide insights on trends, performance and improvement opportunities.

Yoga is one of the top fitness trends of 2016, driven by the consumer trend towards healthy and sustainable lifestyles. Growth has been strong, but with a relatively high cost of labour and capital costs, profit margins are slim.

In this research note we focus specifically on hot yoga studios and the question of their operational sustainability. We ask, can we align the good for both body and planet. The question of sustainability extends to economic and environmental concerns given that the average operating carbon footprint intensity of hot yoga is eight times higher than regular studios.

Using recent assessment data, we provide insights into the top 5 design directions to reduce this impact.

Speak to us about how we can assist deliver these for your designs.

#### **DISCLAIMER**

No warranty: The material and information in this report is provided "as is" and incorporates a variety of sources which are understood to be accurate and reliable but are subject to limitations expressed by third parties and there for presented here without warranties of any kind, either expressed or implied. Any opinions and views in this report reflect the current judgment of TFC and may change without notice. It is each reader's responsibility to evaluate the accuracy, completeness and usefulness of any opinions, advice, services or other information provided in this material.

Limitation of liability: All information contained in this material is distributed with the understanding that TFC is not rendering any legal, accounting advice or opinions on specific facts or matters and accordingly assume no liability whatsoever in connection with its use. In no event shall TFC and its related, affiliated and subsidiary companies be liable for any direct, indirect, special, incidental or consequential damages arising out of the use of any opinion or information expressly or implicitly contained in this publication.

# Overview

The standard practice hot yoga studio design has an operating carbon intensity 8 times greater than regular studios. In absolute terms, a 200m<sup>2</sup> studio has the same annual carbon footprint the equal of 23 Australian households (~1 TCO<sub>2</sub>/m<sup>2</sup> / a).

This translates to an energy cost of about \$200/m<sup>2</sup>/annum or about \$4 per customer per class. This means that up to 25% of income is being spent on energy alone, which puts pressure on

already slim profit margins.

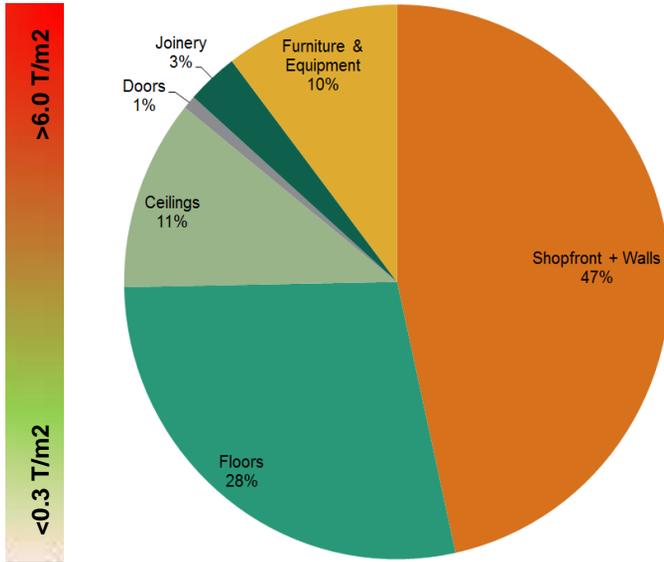
The good news is that best practice design can reduce this by 40% or more with thoughtful design and simple operational management practices.

Delivering low footprint design is good for the planet, profit margins and also customer commitment.

This quick guide is a roadmap to sustainable hot yoga studio design.

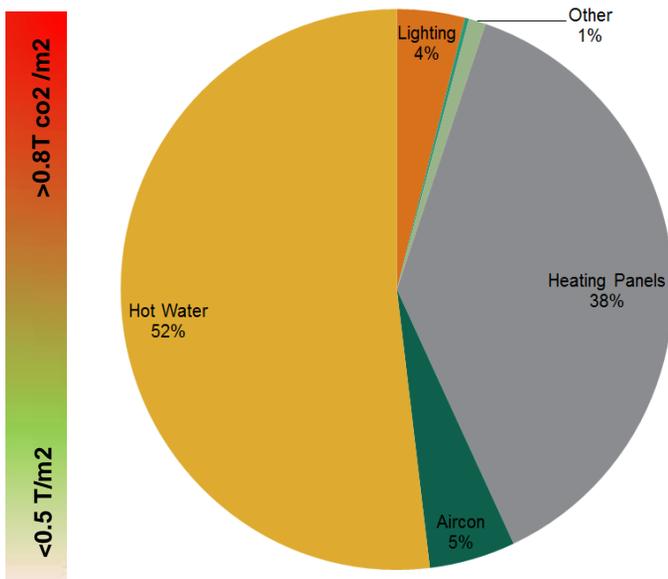


# The carbon footprint



## CAPITAL FOOTPRINT

- ~ 47% of the embodied impact is driven by the wall construction of the studio.
- ~ 30% is in floors which includes wet areas and studios.
- ~ 11% is driven by ceiling construction and finishes.
- The balance in services systems and the heating panels themselves.



## OPERATIONAL FOOTPRINT

- Hot water and heating panel energy constitute the vast majority of the operational footprint.
- Hot water is a big ticket item responsible for about 50% of annual energy use.
- Panels and air-conditioning systems are the other big item.

# The 5 big design tips



## 1 Heating Strategy

The energy efficiency of panels varies significantly. If electric heating panels are the desired solution, then infrared panels are the more efficient mode to consider.

Best practice design should start with optimising total volume to be heated, then consider formatting classes to minimise the cool-down reheat cycle and then consider heat recovery systems with ventilation. Adopting best practice can reduce energy for heating by up to 30%.

## 2 Hot Water

With potentially half the carbon impact arising from hot water use, the number one opportunity is to utilise high efficient gas boilers linked to how water and heating systems with heat recovery. This approach can deliver a total carbon solution with **half the impact** of a traditional electric panel / electric hot water approach. Ensure that shower head efficiency is also at its best to minimise both water and energy consumption.





### 3 Heat Recovery

Adopting a strategy of integrating heating, hot water and pre-heating fresh air is the gold standard for energy efficiency design for hot yoga studios. Using a water based system for heating means a little more focus on class planning but provides scope for low carbon energy from gas and high efficiency.



### 4 Walls

The carbon footprint of walls generally matches the heaviness of the wall material. That is, heavy material such as blockwork has an impact 5 times that of lightweight materials like plasterboard and timber. Seek design solutions with plasterboard or aerated blockwork – which also delivers high thermal performance to support operating energy efficiency.



### 5 Floors

There is a 10 time difference in the carbon footprint between recycled content vinyl and vitrified tile finishes. Typical practice for studio floors is carpet. Whilst relatively low impact, it may be replaced multiple times. The best practice approach is to use reclaimed timber or bamboo strip flooring which provides the lowest carbon footprint.

## DEDICATED TO MAKING THE WORLD A MORE ECOLOGICALLY AND ECONOMICALLY PRODUCTIVE PLACE

The Footprint Company are passionate about the built environment and its contribution to the wellbeing of society.

We believe that sustainability done “right” is the delivery of economic, environmental and social gains simultaneously for all stakeholders.

We strive to deliver smart, simple and sustainable outcomes which enable stakeholders to live well within the means of one planet. That’s why Australia’s property leaders and game changing professionals turn to us.

Get in touch to understand how we can enrich the financial and environmental success of your world.

### Contact Us

[www.footprintcompany.net](http://www.footprintcompany.net)  
T: +61-2-9389-7065  
E: [help@footprintcompany.com.au](mailto:help@footprintcompany.com.au)

### Global Head Office:

Suite 2, 108 Bronte Road,  
Bondi Junction NSW 2022