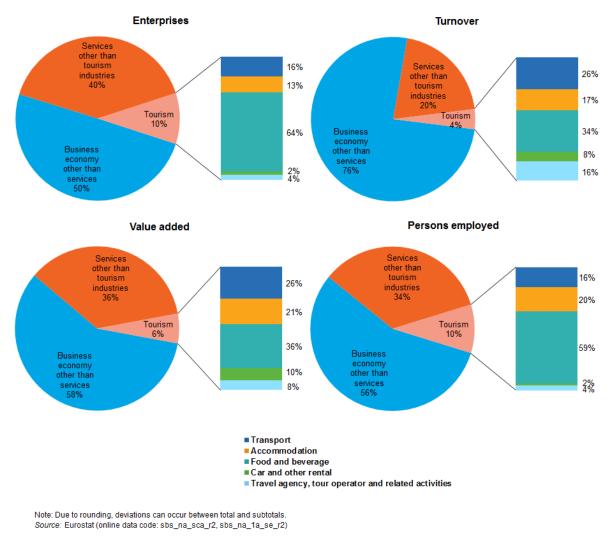
# Why become a sustainable tourism enterprise?<sup>1</sup>

Tourism is one of the fastest growing economic sectors in the world. It contributes to about one tenth of the global GDP and employment (UNWTO & UNDP, 2017). This means that a tourism enterprise is part of a sector that could be an important contributor to sustainable development in social, economic and environmental terms both locally and globally.

Even if an enterprise is small it is a puzzle piece in the overall picture. Statistics show that small and medium sized enterprises (SMEs) make up 99 % of the total enterprises across the EU; accounting for 70 % of the jobs and 60 % of the overall turnover from manufacturing and services (Constantinos, 2010).



eurostat O

*Figure 1: Number of small and medium enterprises, turnover, value added at factor cost and number of persons employed. EU – 28, 2016 (%) (EC, 2018)* 

SMEs in the tourism industry are also major contributors to the European economy, contributing significantly to the number of functioning enterprises and the number of people employed in the sector, something Figure 1 shows. In terms of tourism SMEs impact on the environment, only two

<sup>&</sup>lt;sup>1</sup> The information in this part of the report is based on pre-corona figures and prognoses.

thirds of European SMEs are actively reducing their waste and saving energy (EC, 2018). However, more SMEs are predicted to adopt environmentally friendly practises as a result of pressure from the market place and environmental legislation (Constantinos, 2010).

# Living within the limits of our planet

We have recently entered a new epoch in earth history where human activities represent the dominant driver of environmental change (Rockström et al., 2009; Steffen et al., 2015). An overwhelming strand of literature from all over the globe confirm that we are no longer living within the limits of our earth systems (IPBES, 2019; IPCC, 2019).

A group of leading academics from a range of disciplines have conceptualised what they call nine planetary boundaries. They are limits on carbon dioxide emissions, pollutants, biodiversity loss among other factors, that should not be crossed in order to provide a safe space for humanity to thrive (Figure 2) (Rockström et al., 2009; Steffen et al., 2015).

They identify that four of these boundaries have now been crossed as a direct result of human activities, these are climate change, biogeochemical flows, land-system change and biosphere integrity, these four are described in more detail below.

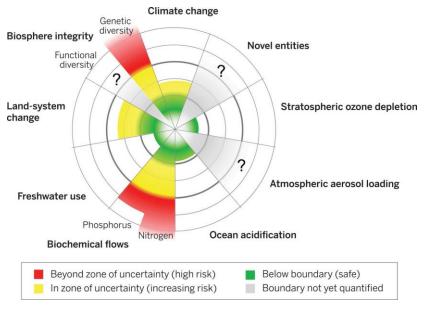


Figure 2: The nine Planetary Boundaries from Steffen et al. (2015)

## Biodiversity loss and extinctions (Loss of biosphere integrity)

The biosphere, the living parts of planet Earth, is at risk. 25 % of plant and animal species (the genetic diversity) are currently at risk of extinction and the global ecosystems making up the biosphere have declined by 47 % in extent and condition since 1900 (IPBES, 2019).

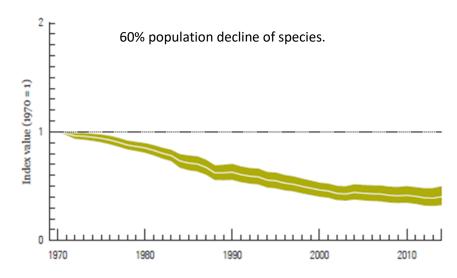


Figure 3: 16,704 populations representing 4.005 species monitored across the globe declined by 60% from 1970 to 2014. The white line shows the index values and the shaded areas represent the statistical uncertainty surrounding the trend (range: -50% to -67%). Figure and numbers copied from the Living Planet Report – 2018 (WWF, 2018, p. 18).

The change is happening right now. WWF's global living planet index indicate that the populations of 4505 species have declined by 60 percent from 1970 to 2014 (Figure 3).

The main driver of these declines is land-use change, but also factors like the demand for water and other natural resources are important. Improvements to the biosphere can be made by protecting and rehabilitating ecosystems whilst improving connectivity between them. To create nature conservation areas is one such measure.

## **Climate Change**

The carbon dioxide in the atmosphere has already surpassed the proposed levels to maintain a safe operating system for humanity. Consensus that climate change is linked to human activities is between 90-100 % for scientists who are employed to measure, monitor and analyse changes in our climate (Cook et al., 2016). In order to return to acceptable levels, action is required across industries to reduce emissions.

### Nitrogen and phosphorus flows to the biosphere and oceans

Nitrogen and phosphorus support the growth of plants. These substances are recycled globally through natural systems. According to Steffen et al. (2015) this cycle is now at high risk. Agricultural productivity relies on human-made nitrogen and phosphorus fertilisers which are more reactive than those found in nature. These fertilisers are changing the natural nitrogen and phosphorus cycles, and they also cause pollution in coastal areas through leaching from agricultural land. This pollution is an extra stress on the biosphere and can result in biodiversity losses combined with social and economic losses. More sustainable agricultural practices, which have a lower impact on natural cycles, are required to reduce impacts within this planetary boundary.

#### Land system change

Land use change from forests, grasslands, wetland and more to agriculture is a common practice. Such land use change can reduce biodiversity, change water flows and have an impact on the natural carbon, nitrogen and phosphorus cycles. Land is a limited resource and therefore, decisions regarding land use change should be taken with sustainability in mind.