



Carbon Footprint Target Setting for Place Services

Based on data from Assessment Period:
1st April 2019 – 31st March 2020

Executive Summary

Carbon Footprint Ltd has completed a forecast of the greenhouse gas (GHG) emissions of Place Services until 2050 based on a dataset provided by the company for the period 1st April 2019 to 31st March 2020.

Key Outcomes

- The majority of Place Services's emissions are from the supply chain elements. As these are the majority of the emissions these should be the focus for carbon reductions.
- Place Services should reduce below the 1.5°C level identified in figures 1 and 2, to achieve the near term SBTi target criteria.

Recommendations

- Work alongside your suppliers to conduct emissions assessment and set in place a reduction strategy.
- Switch the gas heating system to electric as Place Services are on a 100% renewable electricity tariff.
- Implement a salary sacrifice scheme to increase the influence Place Services has on their grey fleet, this will help to expedite the transition to low carbon transport.

Breakdown of market-based carbon footprint

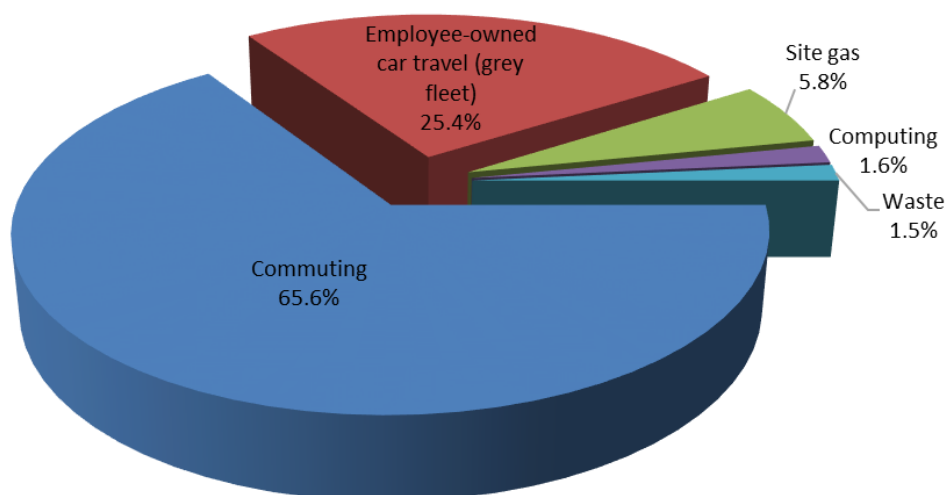


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Quality Control

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1. Carbon & sustainability targets

1.1. Target setting

We recommend targets are set against a growth metric, to account for changes in the size of the business. For Place Services we recommend setting the reduction target on absolute emissions basis, to align with Science Based Targets Initiative guidelines.

There are four categories of carbon dioxide¹ reductions to consider whilst setting targets:

1. **Passive Reductions** – these are carbon reductions that would happen without any action needed by the company e.g. the decarbonisation of the electricity grid will gradually reduce the carbon emissions associated with the electricity you use and purchase
2. **Market-Based Reductions** – these are achieved by selecting and paying for energy tariffs that have lower emissions e.g. buying a green electricity tariff.
3. **Active Reductions** – these are achieved by making technological, behavioural and operational changes within the business. E.g. choosing to reduce the number of miles driven in cars; choosing to put a limit on the number of flights people make; investing in new technology to reduce energy consumption etc.
4. **External Reductions** – carbon **compensation/offsetting** to reduce emissions external to your own footprint to reduce your Net emissions

Figure 1 shows this recommended approach applied to Place Services' emissions to 2050.

The **Passive Reductions** assume:

- Electricity grid emissions will reduce linearly to zero by 2035 (which is the UK's target to achieve zero carbon emissions electricity grid). Note: the grid emissions have reduced by approximately 50% over the last 5-6 years on a tCO₂e per kWh basis. This affects site and home-worker emissions.
- Grey fleet will transition to be 100% renewable by 2036. In the assessment we assume renewable cars will require the same amount of energy as those powered by internal combustion engines based on the litres of fuel burned by place services in the 2019/20 data period.
- Supply Chain emissions intensity will be consistent to 2050 and there will be no increase in the data accuracy provided by Place Services suppliers
- Based upon discussions with Place Services we have forecasted a 6.5% rate of business growth annually until 2050

The **Active Reductions** assume:

- Place Services's suppliers, agricultural and forestry, will undertake carbon emissions assessments and provide primary emissions data for work conducted on projects they manage. We forecast this will result in 9.5% annual emissions reduction as they increase the number of suppliers conducting carbon emission assessments and they set in place emission

¹ Referred to as "carbon" or "CO₂"



reduction strategies. These reductions will therefore be achieved through both increases in data accuracy and active reductions. The reductions associated with increased data accuracy are forecast based on discussions with Place Services, where they identified their forestry and agriculture activity as low-intensity management. We therefore have modelled reductions on both reported and actual reductions in Place Services emissions

- We have also forecasted that Place Services will transition to a salary sacrifice scheme for electric vehicles in 2024, resulting in total grey fleet adoption by 2035
- We have also forecasted a transition from gas to electric heating in 2027 transitioning their headquarters to 100% renewable powered
- Based upon discussions with Place Services, we have forecasted a 6.5% rate of business growth annually until 2050

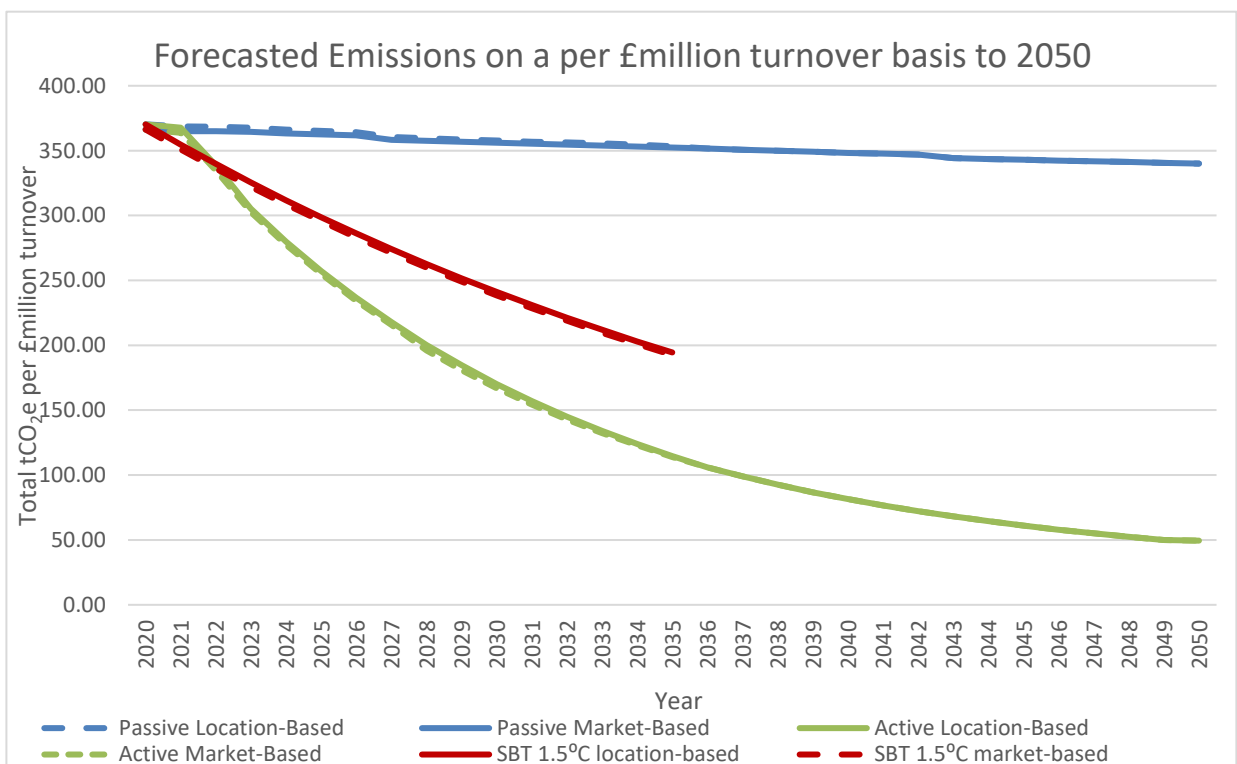


Figure 1: Emissions forecast for Place Services until 2050² based on emissions intensity

The above graph provides simulations that are designed to be best and worst-case scenarios. However, it is impossible to predict the future with 100% accuracy. The area between the passive and active lines represents emissions that could be saved. Figure 1 forecasts Place Services’s reported emissions on a per £million turnover intensity metric, this highlights the increase in reported carbon efficiency by taking an active approach. The Science Based Targets lines have been included; please note that these reductions would be required on an absolute basis inclusive of business growth and therefore absolute emissions should be used for tracking your progress to net zero.

² Includes well-to-tank (WTT)



Figure 2 forecasts the estimated breakdown of Place Services’s future emissions on an absolute emissions basis, accounting annual business growth forecast by Place Services. Absolute emissions should be used for Place Services SBTi submission as emissions will be measured an absolute contraction basis.

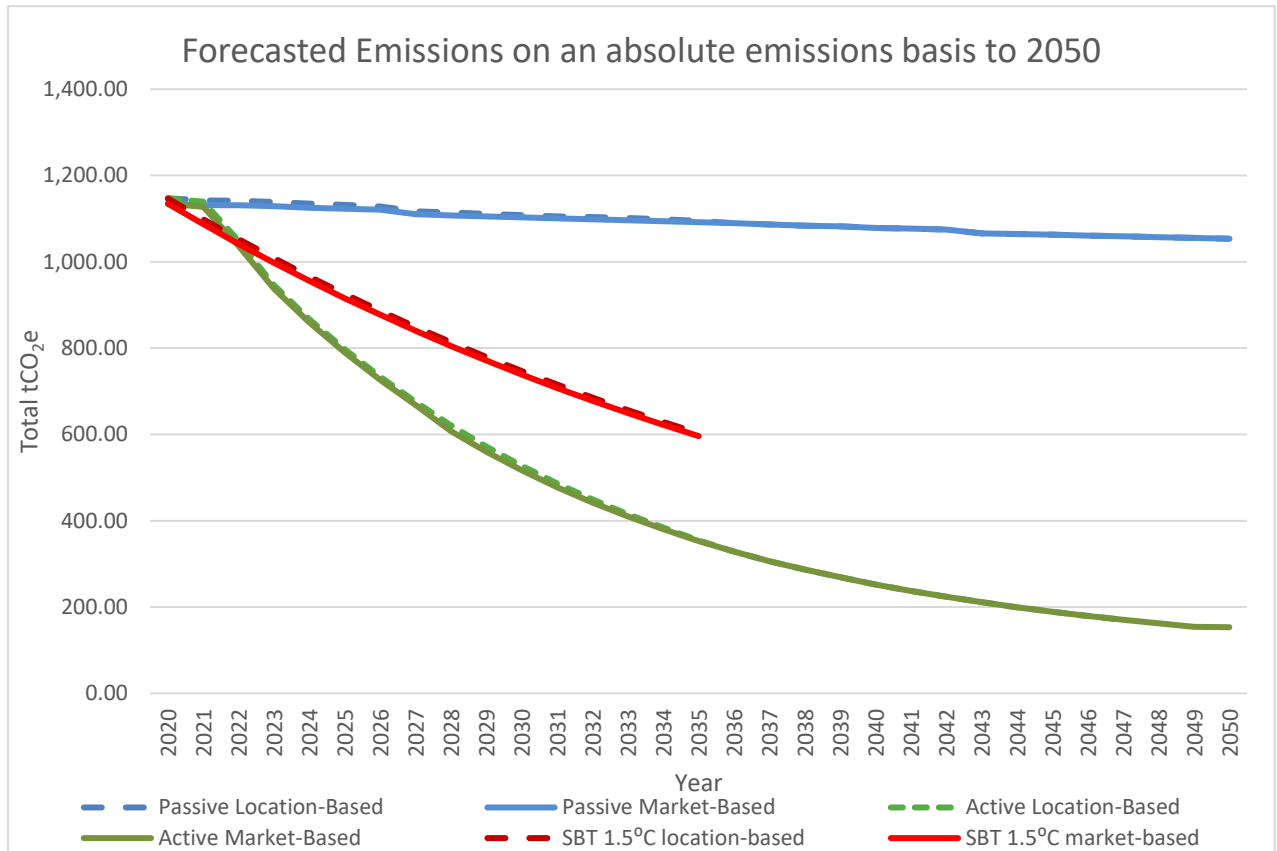


Figure 2: Emissions forecast for Place Services until 2050² Based on absolute emissions

All targets set should be reviewed regularly (e.g. on an annual basis) and amended accordingly (i.e. target increased if it is met ahead of schedule). This will prevent complacency if the target set was too conservatively from the onset. An action plan should be developed to set out how the targets will be met and an employee should be allocated the responsibility for carrying out the plan.

1.2. Supply Chain Target Setting

We have forecasted passive supply chain emissions based upon an trends in supply chain emission factors provided by the Office of National Statistics. Active supply chain emissions have been Further forecasted on the increase in data accuracy from obtaining primary emissions data from their suppliers and reductions from their suppliers during their carbon assessment.

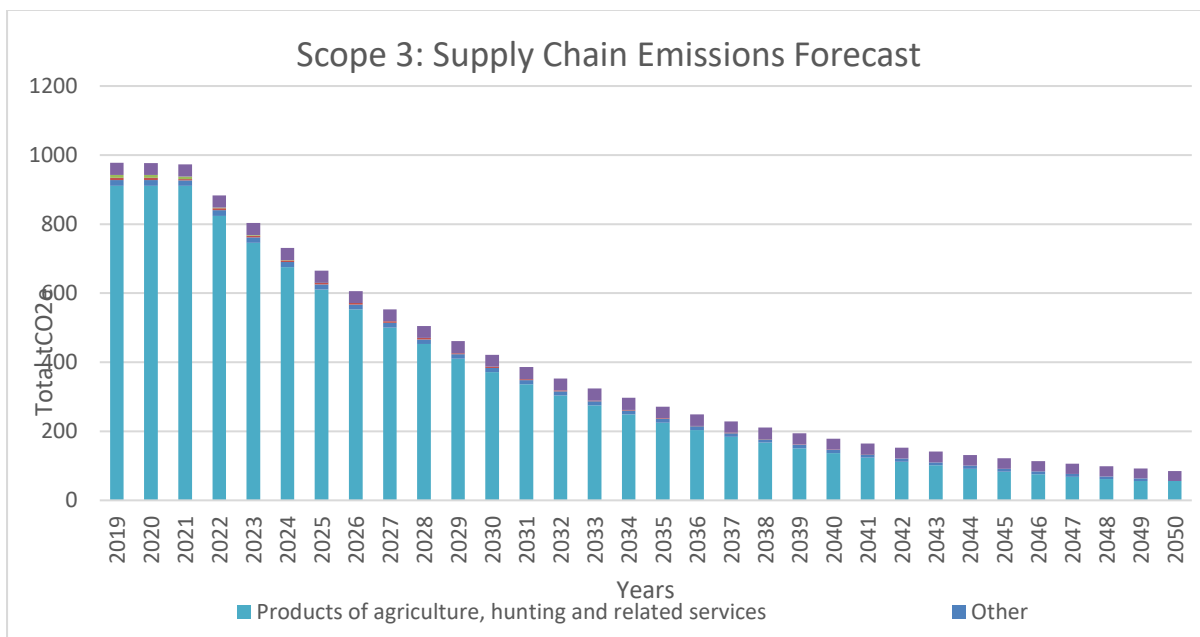


Figure 3: Forecasted emissions from Place Services's supply chain

1.3. Summary of Target Setting Recommendations

- Work alongside your suppliers to conduct emissions assessment and set in place a reduction strategy to increase data accuracy and reduce actual emissions.
- Work alongside Essex County Council to switch from gas to electric heating
- Implement a salary sacrifice scheme to speed the transition of there grey fleet to low carbon electric vehicles.

2. References

1. BEIS GHG Conversion Factors for Company Reporting (2016-2021)
2. Carbon Footprint Ltd's Target Setting White Paper (2021)
3. Guidelines to Defra's Greenhouse Gas (GHG) Conversion Factors for Company Reporting – annexes (June 2013)
4. Science Based Targets Initiative (SBTi) (2021)
5. The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition (March 2004)