YORKSHIRE DALES
National Park Authority

CARBON REDUCTION PLAN

Our overall objective is based on assumptions which seem reasonable at this time, that:

- by installing further sustainable energy systems, we can completely end our use of oil and gas for heating;
- our future supply of electricity will be certifiable as zero carbon;
- targets for reducing the volume of business travel are realistic: a 10% reduction by 2025, from a change to operational practices, and a subsequent 50% reduction linked to the introduction of an Electric Vehicle (EV) fleet and the gradual adoption of EVs by the owners of the 'grey fleet' (Members, officers, volunteers);
- an EV alternative to Landrovers will become available and affordable.

Assuming the targets are achieved, this will leave the Authority with a final residue of emissions comprising:

- **Woodchip.** Our two wood-burning heating plants replaced oil systems, so are already more sustainable. They were installed when grant incentives were available for the energy generated, and these agreements (and income streams) have some years to run. Once they end, there would be an option to convert to a green-electricity powered system but the carbon savings would only be moderate.
- **Grey Fleet (Scope 3), Members, officers and volunteers**. Individuals are likely to continuing operating diesel/petrol vehicles beyond 2030, though it should be noted that the Government have announced that they intend to ban the sale of new petrol and diesel vehicles form 2032. If it is decided at some later date to manage these emissions down further, an updated plan will be necessary.
- **Rail travel**: this is the carbon-efficient travel alternative to cars. So other than making sure all journeys are necessary, we don't plan to manage this down;
- **Air travel**. The costs of alternative transport (international rail) and extra officer travel time very significantly outweigh the benefit of any carbon savings from our shifting to rail. The number of air travel business journeys per year is very low. Longer term, carriers are committed to reducing the carbon footprints of their operations, so the net emissions from air travel will in any case fall over time.

1. PREMISES

Emissions from our premises will be reduced by:

Reducing the consumption of externally generated electricity by installing additional renewable energy systems and further energy-saving measures

We have developed a detailed and fully costed plan, based on a review of our premises and on discussions with potential suppliers about available technology; the details of this plan are listed below. It is intended that these actions will be completed by March 2022 This work is additional to an already extensive plan of work commitments required by the Authority's Property Strategy, although at this point we think we can deliver this within our existing staff resources.

- **Photovoltaic (PV; solar) panels**: four premises have been identified as suitable, based on cost efficiency, the size and orientation of available roof surfaces, and planning policies.
- **Air Source Heat Pumps**: at three National Park Centres (Grassington, Aysgarth and Malham) to replace existing oil or gas-fuelled systems. Work on installing the Grassington system has now largely been completed. The Malham system will replace an oil-fired boiler (an additional cash saving of ~£4k pa from not having to buy oil). The only remaining potential use of 'Burning Oil' and for 'Natural Gas' will be in the back-up heating systems maintained in case our wood-fuelled boilers at DCM or Colvend fail: we will seek to manage maintenance and repair contracts as effectively as possible to limit the use of those back-ups, setting our target for emissions for 'Burning Oil' and 'Natural Gas' at zero.
- **LED (Light-Emitting Diode) lighting**: a wholesale replacement of our existing lighting. This will also give us the opportunity to reduce the Authority's own light emissions in support of our 'Dark Skies' objective.
- **Insulation.** A considerable volume of work has already been undertaken to insulate our premises, but a small amount remains to be done at Colvend and at the National Park Centres. We also plan to double-glaze our (leased) premises at Orton.
- **Air conditioning**. The IT Server room at Yoredale is a major heat generator, and therefore user of air conditioning (and electricity). We will replace the existing air conditioning system with one that reduces power consumption.

There will be some additional costs associated with maintaining new systems introduced as part of this Action Plan. However, it is assumed at this stage that these will be similar to the running costs associated with the systems they will replace, so no additional allowance for such costs has been included.

Switching to a 'green' electricity supplier

The electricity we use is already considerably greener than it was in 2006, because the mix of inputs has changed fundamentally: ~40% of UK electricity is now generated from renewable sources, compared with less than 10% in 2006.

The Authority is currently locked into an electricity supply contract until 2023. This contract incorporated a narrow window of opportunity in early February to switch to a '100% green' tariff. As the cost of switching (in unit price paid for our electricity) was estimated to be

~£260 pa (and that waiting until this Action Plan was agreed would mean losing that opportunity) we have made this switch.

Whilst common sense suggests that switching to a ‘fully green’ supply of electricity should reduce our associated emissions to zero, this is not currently the way that the UK Government Greenhouse Gas Conversion factors for Company reporting work. Instead, they attribute an average emissions factor to all electricity as a pooled supply. Our ‘95% reduction target’ is based on the assumption that we will at some point be able to disaggregate green electricity from the pooled sources that currently include natural gas.

2. TRAVEL

Electric Vehicles (EVs) and EV charging Points

We will install 6 EV charging points for use by Authority personnel and a further 7 ‘public use’ points as a first step. This will facilitate the later switch to a leased EV fleet and – by providing this facility now - should encourage officers and Members to start to move their own vehicles to an EV. Our cost projections assume that grant applications now submitted will be successful in providing 75% (£33k) of the necessary money.

It is likely that further charging points will be needed as the shift to EVs takes place, at an additional cost to the Authority as yet unquantified.

Given central government’s progressively-shortening deadline for the withdrawal of sales of new petrol / diesel vehicles, the intention is to move to a completely EV fleet by 2030. This would remove all of our (Scope 1) fleet emissions, although this is dependent on the development of vehicles that could replace our Land Rovers and other off-road vehicles.

Our current fleet lease runs until 2024; we’ve already made significant carbon savings through moving to fuel-efficient vehicles. The next renewal will see a move to hybrid or full EVs, provided that this meets our practical requirements and is affordable. However, that may be too early for a solution to the Landrover issue.

We’ve taken a supportive step in this direction, through providing a ‘Green Vehicle’ salary sacrifice scheme for employees.

Reducing petrol/diesel vehicle use for business travel

This programme will be put in place during 2020. It will include actions which can be taken up immediately, as well as a number which will require development work; components range from car sharing through to videoconferencing.

In terms of the leased fleet travel (Scope 1), we will seek to reduce these as far as practicable in the short to medium term, although – longer term – the eventual shift to EVs should remove these emissions altogether.

We will also seek to reduce grey fleet (Scope 3) emissions by the adoption of better practices. While we don’t have any control over what vehicles officers, volunteers and Members choose to drive, it is hoped that the introduction of EV charge points will encourage an early shift away from petro/diesel vehicles. However, as the Government’s current intention is to end the sale of new petrol / diesel cars by 2032 and that those vehicles may last perhaps at least another 10 years, we may be left with some carbon emissions long after 2030. At that point, the Authority may want to consider increasing the size of its leased EV fleet so that it can restrict all officer business mileage to EVs; imposing such a strategy on Members and volunteers may be more challenging.

3. **OTHER INDIRECT SOURCES OF EMISSIONS**

The consultation with officers identified other potential changes to the way the Authority operates that could reduce emissions – but where these reductions would <u>not</u> show on our own carbon ‘balance sheet’.

Investment

Members have already asked for sustainability (and thus carbon emissions) to be considered as a possible factor in the Authority’s investment activities. Our investment activities take two forms:

- Direct: the temporary investment of working cash balances with (mostly) high street banks, and which earns the Authority a small but useful amount of interest;
- Indirect: our participation (on behalf of employees) in the Local Government Pension Scheme (LGPS).

For the former, we participate in a pooled scheme actively managed by NYCC. It has three objectives: to make sure our cash is secure; is available when we need it; and, makes a reasonable return of at least above Bank of England base rates. The critical factor is security, and this is actively managed using information from credit ratings agencies and other sources; invariably, this means that only banks with AAA credit ratings are used to take deposits.

In relation to LGPS investment. We have no direct control over how investments are made. LGPS schemes have an obligation to seek to maximise the return on their investments. However, more recently the Pension industry (including LGPS) has started to recognise that directing investment towards businesses or projects with better sustainability (and, particularly, carbon-saving) prospects is of real benefit to wider economic performance and therefore the market in general pressure is now building. YDNPA is – in terms of fund value - only a very small participant in the LGPS scheme, and consequently we have limited influence on future investment strategy. Nonetheless, Members of the F&R Committee were keen to see that, where opportunities arise, we will lend our voice in support of a move away from investing in businesses with poor environmental credentials. However, we need to bear in mind that, although it is the Authority’s responsibility to contribute to and manage its obligations under the LGPS, our real role is a custodial one: the assets in the Pension Fund do not ‘belong’ to the Authority, but to our pensioners, past present and future.

March 2020