

RURAL ECONOMY AND CONNECTIVITY COMMITTEE

SUBMISSION FROM PEDAL ON PARLIAMENT

THE DRAFT CLIMATE CHANGE PLAN (RPP3)

1. We would like to start with the positives:
 - We welcome the recognition that one of 10 key behaviour changes needed is to become less reliant on the car.
 - We welcome the statement that "travel opportunities should prioritise walking and cycling before public transport and cars".
 - We welcome the exploration of consolidated logistics centres to reduce the number of HGVs in Scotland's towns and cities.
 - Finally, we welcome the inclusion of active travel as one of the 8 transport policy measures, and acknowledge that spending on active travel, and particularly on dedicated infrastructure, is at record levels in Scotland. We welcome the commitment to at least maintain those levels, which means that spending decisions can be made over a longer (and thus more cost-effective) time frame.
2. However we note that these 'record' levels are only a record because of Scotland's historically low levels of spending compared to European countries where cycling is the norm. Countries such as the Netherlands and Denmark typically spend around £20 per head on cycling infrastructure per year.
3. We also feel that the role of active travel in reducing emissions has been understated by the plan (see below for more details).

Main arguments

4. We are concerned that, when it comes to reducing emissions from road transport, the plans seem to rely almost entirely on the reduction of emissions per kilometre driven, rather than reducing driving overall. We believe that this approach will not bring about the savings envisaged.
5. First, the plan as drafted relies heavily on UK and EU legislation and policy, despite the fact that it now looks all but certain that Scotland will not remain a member of the EU, and that the current Westminster administration looks increasingly hostile to carbon emission reduction policies, especially where they impact on the motorist.
6. Second, the plans assume that the reductions in emissions due to greater fuel efficiency, take up of electric vehicles etc. will not simply result in more vehicle kilometres travelled. In the last 20 years, as the draft plan itself states, almost all of the reductions in emissions due to fuel efficiency have been cancelled out by

increased transport demand. This is only likely to continue given projected economic and population growth, increased van mileage due to Internet shopping, and increased road capacity due to the government's road-building programme.

7. Third, incentives to increase take up of fuel efficient vehicles will tend to increase car ownership (and will also make driving cheaper, further increasing the incentive to drive rather than take another form of transport). Some of the incentives mentioned (such as free parking for electric cars) will undermine the few demand management policies mentioned in the report.
8. We believe that the Scottish government should use the levers it has in its power to reduce the demand for road transport, whether through investment in alternative means of transport, including safe cycleways, or through incentives and behaviour-change schemes.

In more detail

9. We recommend that the Cycling Action Plan for Scotland (CAPS) be fully funded as recommended in the Spokes pre budget analysis¹ and Cycling Scotland's Second CAPS Progress Report.²
10. We disagree with the analysis in the plan that *"Policy outcome 8 will account for a small proportion of overall emissions reduction, as most journeys under a mile are already undertaken by walking"*. Our own calculations, detailed in the appendix below, suggest that achieving the CAPS target of 10% of journeys by bike would save up to 0.2 MtCO₂e per year, or around 5% of the envisaged reduction in emissions from the transport sector. These estimated reductions are in line with the European Cyclists' Federation's calculation on the potential savings across Europe from increasing cycling levels.³
11. At the moment, we believe that achieving the Scottish Government's vision of 10% of journeys by bike (recently reaffirmed with the publication of the latest CAPS⁴) cannot be achieved by 2020.⁵ However, as Spokes have calculated⁶

¹ Spokes' Pre Budget Submission <http://www.spokes.org.uk/wp-content/uploads/2015/04/1611-Spokes-extra-pre-budget-submission.pdf>.

² "A long term increase in sustained funding is required, with year-on-year increases over time towards a 10% allocation of national and council transport budgets as Edinburgh is achieving. The long term commitment to 2030 to dual carriageways between seven Scottish cities should be matched by an equally long term commitment to cycling if modal shift ambitions are to be met and sustained." Cycling Scotland: The Second CAPS Progress Report, June 2016 <http://www.cyclingscotland.org/wp-content/uploads/2013/10/Second-CAPS-Progress-Report-FINAL-Cycling-Scotland.pdf>.

³ European Cyclists' Federation, Cycle More Often 2 Cool Down the Planet: Quantifying CO₂ Savings of Cycling, 2011, https://ecf.com/sites/ecf.com/files/ECF_CO2_WEB.pdf

⁴ Transport Scotland Cycling Action Plan for Scotland 2017-2020, January 2017 <http://www.transport.gov.scot/system/files/documents/reports/Transport%20Scotland%20-%20Policy%20-%20Cycling%20Action%20Plan%20for%20Scotland%20-%20January%202017.pdf>

⁵ Indeed some estimates suggest that at the present rate of progress it will take 300 years <http://www.cyclingweekly.co.uk/news/latest-news/scottish-cycling-target-wont-be-hit-for-350-years-if-current-trends-continue-308385>.

using results from UK-based projects such as the Cycling Demonstration Towns, investment of around £20 per head would result in reaching the 10% target in 2027, and with continued investment, 15% of journeys by bike by 2030, which would further reduce emissions.

12. If this funding came from abandoning the planned reduction in Air Passenger Duty, and reducing the increase in the trunk road construction budget, it would have the added effect of reducing emissions from aviation and from induced demand stemming from increased road capacity.
13. Similarly, if conditions were improved for vulnerable road users by reducing both urban and rural speed limits on residential and minor roads, this would both increase the uptake of active travel, and reduce emissions from motorised vehicles. At the moment, the Scottish Government is confining itself to 'encouraging' cities to adopt 20mph limits;⁷ we believe this should become the default for urban roads. We would also like to see much more widespread adoption of rural 'quiet lanes' policies, as used in Clackmannanshire and other local authority areas in Scotland, to slow traffic on rural roads and make them safer for cyclists, pedestrians and horse riders.
14. We believe that subsidies for electric vehicles should include electric bikes (pedelecs). These have almost as low emissions as conventional bicycles once food calories have been taken into account, (22g/km compared with 21g/km),⁸ and greater uptake would increase the number of km cycled, and thus reduce driving.⁹
15. We welcome the inclusion of consolidated delivery centres in the plan as a means of reducing HGV traffic within towns and cities. This would have an immediate effect on cyclists' safety, and potentially increase uptake in cycling among those who have been put off by mixing with large vehicles. However, we would go further, and suggest that such depots be designed to enable onward delivery by cargo bike and pedelecs, as recommended by the ECF.¹⁰ Consolidation centres should be sited so that they are connected to a network of cycle routes and delivery firms be given trial loans of e-bikes or subsidies to purchase them.

⁶ Spokes' Pre Budget Submission, <http://www.spokes.org.uk/wp-content/uploads/2015/04/1611-Spokes-extra-pre-budget-submission.pdf>.

⁷ Transport Scotland's Cycling Action Plan for Scotland, 2017.

⁸ European Cyclists' Federation, Cycle More Often 2 Cool Down the Planet: Quantifying CO2 Savings of Cycling, 2011, https://ecf.com/sites/ecf.com/files/ECF_CO2_WEB.pdf

⁹ Dutch studies have found that pedelecs cover 22% more km per week than standard bikes; 75% more for commutes, giving them the potential to replace more car trips. European Cyclists' Federation, Quantifying CO2 Savings of Cycling, 2011.

¹⁰ European Cyclists' Federation, A New Move for Business: Electric Cycle Logistics in European Cities, 2016, <https://ecf.com/sites/ecf.com/files/A%20NEW%20MOVE%20FOR%20BUSINESS%20IN%20EU%20CITIES.pdf>.

16. We note from the draft plan that the Climate Conversations made improving public transport one of the public's top two priorities, yet there is nothing in the plan about encouraging use of public transport. This is a major omission as it could start to make a difference now, and would also multiply the effect of investment in low-emission buses and rail electrification. Public transport policies should include multimodal travel, such as cycling to stations and bus stops, setting up a virtuous cycle. Increasing cycling levels mean that each bus route and train station can serve a wider population, making rural bus routes potentially more viable. Better public transport also reduces car dependency, which in turn increases the likelihood of using another mode of transport such as cycling for suitable trips.

17. We suggest that alongside policies to improve public transport overall, the Scottish government should adopt policies to encourage on-street bike hire schemes, better transport of bikes on trains and buses, better bike parking at stations, bus stations and also outlying bus stops, and safe cycling and pedestrian routes to reach them, including rural footpaths.

Pedal on Parliament
2 February 2017

Appendix: Calculating the impact of increased cycling

18. We were disappointed to see that the TIMES model used in the plan did not appear to include active travel as a mode of transport, and that there was no evidence of any modelling to show the carbon-reduction impact of increased uptake of active travel, just the assertion that it would have a small impact (bizarrely, based solely on journeys under a mile and considering only walking). This is a backwards step from the 2013 plan which calculated annual savings of 139 KtCO₂e from switching to more sustainable forms of transport (including active travel) by 2020, and 277 by 2027.¹¹ Therefore we have attempted here to come up with a "best guess" estimate of the impact that attaining the Scottish Government's vision of 10% of journeys by bike by 2020 would have on emissions, were the CAPS to be fully funded. We would welcome the Scottish government producing a more robust assessment of its own if it feels our calculations are inaccurate.
19. It is difficult to predict exactly what the impact would be of increasing cycling on reducing car mileage, but we have followed the ECF's methodology for calculating the impact of increased cycling on CO₂ emissions,¹² and used official figures from the Scottish government. Our approach is as follows:
- The current estimated distance cycled in Scotland in 2013 was 329 million km, making up 1% of all journeys that year.¹³
 - If cycling were to reach a 10% modal share in Scotland, it seems reasonable to estimate that that would amount to around 3,290 million kilometres per year, or around 10 times the 2013 figure, meaning an additional 2,961 million kilometres over the 2013 total.
 - For every kilometre cycled instead of driven, on average, 0.213g CO₂e would be saved.¹⁴
 - However, we can't assume that 100% of those additional journeys are replacing car journeys. According to the 2013 climate change plan calculations, 33% of those journeys might be expected to be switching from the car.¹⁵

¹¹ Low Carbon Scotland: Meeting our Emission Reduction Targets 2013-2027, June 2013, <http://www.gov.scot/Publications/2013/06/6387>.

¹² European Cyclists' Federation, Cycle More Often 2 Cool Down the Planet: Quantifying CO₂ Savings of Cycling, 2011, https://ecf.com/sites/ecf.com/files/ECF_CO2_WEB.pdf

¹³ Cycling Scotland, Annual Cycling Monitoring Report 2015, <http://www.cyclingscotland.org/wp-content/uploads/2015/03/Annual-Cycling-Monitoring-Report-2015-v2.0.pdf>

¹⁴ According to the Climate Challenge Fund Guidance notes (<http://www.keepsotlandbeautiful.org/media/291758/ccf-application-guidelines.pdf>), the average car emits 234g CO₂ per km. The European Cyclists' Federation (https://ecf.com/sites/ecf.com/files/ECF_CO2_WEB.pdf) calculate that the average total emissions for cycling (including the lifecycle emissions from manufacturing and maintaining the bike) are 21g per km, giving a net saving of 213g of CO₂e.

¹⁵ This chimes with the ECF data based on bike share schemes (https://ecf.com/sites/ecf.com/files/ECF_CO2_WEB.pdf), which suggests that 32% of additional journeys would otherwise have been done by car.

- This gives us an estimate of 977.1 million fewer kilometres driven each year, saving 0.208 Mt (megatonnes) of CO₂e annually.
- As the overall reduction envisaged from the transport sector is 4.2MtCO₂e, this amounts to just under 5%, which is a significant contribution towards the total.