Net Zero Review: Call for evidence

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<u>Positive Money</u> is a not-for-profit research and campaigning organisation, working towards reform of the money and banking system to support a fair, democratic and sustainable economy. We are funded by trusts, foundations and small donations.

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1. How does net zero enable us to meet our economic growth target of 2.5% a year?

- 1. After the Covid-19 pandemic, we are still facing multiple, intersecting crises, in the cost of living, energy security, climate and nature. There is a large body of economic evidence including from the International Energy Agency¹ and the United Nations² that ambitious climate policies are key to a rapid and sustainable economic recovery, in the UK and across the globe.
- 2. The transition to net zero (estimated to cost a maximum of 2% of UK GDP) is estimated to have a net benefit equating to around 4% of GDP.³ By acting fast, we can establish the UK as a global leader, creating and shaping new green markets and capitalising on first-mover advantage.
- 3. Analysis by McKinsey shows that supplying the goods and services to enable the net zero transition could be worth £1 trillion by 2030 to UK businesses.⁴
- 4. The net zero transition could help deliver regional prosperity in left behind areas outside London and the South East. The Confederation of British Industry has shown that regions that successfully attract businesses in the net zero space are likely to see greater prosperity, with wage analysis demonstrating a wage premium for these jobs, compared to many other sectors.⁵
- 5. A green industrial strategy will also create hundreds of thousands of new jobs in the sectors of the future. Close to half a million people already work in low-carbon businesses and their supply chains.⁶ The Institute for Public Policy Research has estimated that decarbonising the UK's housing stock could also create 138,000 new

¹https://www.iea.org/news/iea-offers-world-governments-a-sustainable-recovery-plan-to-boost-econo mic-growth-create-millions-of-jobs-and-put-emissions-into-structural-decline

² https://news.un.org/en/story/2021/03/1086852

³https://www.lse.ac.uk/granthaminstitute/publication/what-will-climate-change-cost-the-uk/#:~:text=He adline%20findings,2.4%25%20of%20GDP%20by%202100.

⁴https://www.mckinsey.com/capabilities/sustainability/our-insights/opportunities-for-uk-businesses-in-the-net-zero-transition

⁵ https://www.cbi.org.uk/articles/what-are-the-business-opportunities-in-the-net-zero-transition/ ⁶https://www.ons.gov.uk/economy/environmentalaccounts/adhocs/11120lowcarbonandrenewableener gyeconomylcreesurveydirectandindirectestimatesofemploymentuk2014to2018

jobs.⁷ The offshore wind sector alone is expected to employ up to 70,000 people by 2026 in areas such as Yorkshire and the Humber, Scotland and the Solent.⁸

- 6. There are many other social and economic co-benefits, including significant improvements in health and wellbeing due to cleaner air, warmer houses and greener public spaces. For example, retrofitting homes would reduce demand for energy while saving households hundreds of pounds a year in bills. The UK has some of the least efficient homes in Europe. Air source heat pumps are four times more efficient than gas boilers. The Green Homes Grant's Local Authority Delivery scheme has already saved recipient households £1.2 billion on their energy bills.
- 7. The costs of inaction are extremely high and far outweigh the costs of mitigation. Under current policies, the total cost of climate change damages to the UK are projected to increase from 1.1% of GDP at present to 3.3% by 2050 and 7.4% by 2100,¹² with catastrophic disruption to the global economic system. Research suggests G7 countries could lose 8.5% of GDP a year, representing nearly \$5 trillion wiped off their economies, within 30 years if temperatures rise by 2.6C.¹³
- 8. Similarly, the OBR suggested that funding the UK's transition to net-zero emissions could cost the government less over 30 years than the pandemic has cost in just two, if governments around the world took early action to reduce emissions.¹⁴
- 9. Investment in fossil fuels¹⁵ and ecological damage¹⁶ exposes the UK to serious financial stability risks as assets become stranded. As the Bank of England recognises, climate change threatens to wipe \$20 trillion off the value of assets in the most-affected sectors by 2050.¹⁷¹⁸

⁷ https://www.ippr.org/research/publications/pump-up-the-volume

⁸https://3c588115-556c-4078-9547-344b9bf6665b.filesusr.com/ugd/1c0521_f41bc11dba254cbe9562a 9db75afe2d0.pdf

https://theenergyst.com/europes-leakiest-homes-new-study-fingers-britain-fails-to-plug-gaps/ https://environment.inparliament.uk/sites/environment.inparliament.uk/files/2022-03/How%20to%20power%20an%20affordable%20net%20zero%20economy%20-%20APPG%20briefing_%20%28002%29_0.pdf

¹²https://www.lse.ac.uk/granthaminstitute/publication/what-will-climate-change-cost-the-uk/#:~:text=He adline%20findings.2.4%25%20of%20GDP%20bv%202100.

¹³https://www.swissre.com/dam/jcr:e73ee7c3-7f83-4c17-a2b8-8ef23a8d3312/swiss-re-institute-expertise-publication-economics-of-climate-change.pdf

¹⁴https://www.ft.com/content/ba2cdf7d-898d-4b22-b40b-8d2d80b631f8?utm_campaign=Carbon%20Br ief%20Daily%20Briefing&utm_content=20210707&utm_medium=email&utm_source=Revue%20Daily ¹⁵ Rainforest Action Network, 'Banking on climate chaos: fossil fuel finance report 2021': https://www.ran.org/bankingonclimatechaos2021/

¹⁶ Portfolio Earth, 'Bankrolling Extinction' report: https://portfolio.earth/

¹⁷ Bank of England speech Sarah Breeden, 'Avoiding the storm: Climate change and the financial system', April 2019:

https://www.bankofengland.co.uk/-/media/boe/files/speech/2019/avoiding-the-storm-climate-change-and-the-financial-system-speech-by-sarah-breeden.pdf

¹⁸ International Renewable Energy Agency (IRENA) report 2017: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2017/Mar/Perspectives for the Energy Transition_2017.pdf

- 10. The Bank of England's recent climate stress test estimates that climate change could cost UK banks up to more than £340 billion in a severe physical risk scenario in which climate action is delayed. 19 There is also increasing awareness of the strong link between nature loss and financial instability.²⁰
- 11. Earlier this month, new research from think tank Finance Watch suggested that the world's 60 biggest banks have over £1.2 trillion (\$1.35 trillion USD) of exposures to fossil fuel assets.21
- 12. The Bank of England also recognises that price shocks associated with extreme weather and natural disasters may have serious effects on inflation, and are different to shocks the Monetary Policy Committee has faced in the past.²²

2. What challenges and obstacles have you identified to decarbonisation?

- 13. Cementing the UK's energy security and economic resilience will require a rapid reallocation of public and private finance away from polluting sectors and towards green alternatives. The Climate Change Committee recommends that to reach net zero by 2050, the UK must upscale low-carbon investment through public and private sources from £10bn/year in 2020 to £50bn/year by 2030.²³
- 14. Currently, levels of public and private investment are a long way off what is required to meet these goals. The UK banking sector is in fact pulling in the opposite direction, continuing to pour billions of pounds a year into fossil fuel development at home and abroad. Emissions from projects financed by the UK banking sector are greater than those of other European countries, with the biggest five UK banks pouring £227 billion into fossil fuel development between 2016 and 2020.24
- 15. A key challenge and missing piece of the government's Net Zero architecture is a comprehensive plan for how the government will drive the transition, ensure the costs and benefits are fairly distributed, and support the private sector in creating and investing in new sustainable markets. Financial institutions, real economy firms, regulators and governments must pull together in the same direction.

¹⁹ Bank of England, 'Results of the 2021 Climate Biennial Exploratory Scenario (CBES)', 24 May 2022

²⁰ NGFS, Central Banking and Supervision in the Biosphere, 2022

²¹ https://www.finance-watch.org/publication/a-safer-transition-for-fossil-banking/

²²https://www.bankofengland.co.uk/guarterly-bulletin/2022/2022-q4/climate-change-possible-macroec onomic-implications

²³https://www.theccc.org.uk/wp-content/uploads/2020/12/The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf

²⁴ https://www.ran.org/bankingonclimatechaos2021/

16. The Climate Change Committee has also made clear that climate goals must be fully integrated into financial regulation for the UK to achieve its net zero target under the 2008 Climate Change Act. ²⁵

3. What opportunities are there for new/amended measures to stimulate or facilitate the transition to net zero in a way that is pro-growth and/or pro-business?

- 17. The government's current approach to climate-safe financial regulation relies far too heavily on financial institutions' voluntary pledges, disclosures and information-gathering exercises.
- 18. Industry groups have been active in calling for clarity on the government's transition pathways across sectors as well as stronger regulation, to provide the certainty businesses need to adapt and reap the benefits of net zero. For example, Aviva has joined civil society groups in calling for a new statutory objective for regulators to support rapid decarbonisation and nature protection.²⁶
- 19. This month, thirty leading UK companies and financial institutions, managing around £3 trillion in assets, signed a joint letter to the Chancellor of the Exchequer calling on the government to set out a 'Net Zero Investment Plan' alongside the upcoming Green Finance Strategy.²⁷
- 20. Last year, UK companies including various FTSE-listed companies and financial institutions responsible for over £4.5 trillion GBP in assets called for net-zero transition plans to be made mandatory for large companies.²⁸

4. What more could government do to support businesses, consumers and other actors to decarbonise?

21. The government should set out an ambitious, whole-of-government strategy for aligning financial flows with a 1.5°C transition pathway, and adaptation and biodiversity goals, to be regularly assessed with independent mapping of progress and investment gaps across public and private finance.

Diverting finance away from fossil fuels

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22. The government should not approve licences for any new domestic fossil fuel expansion projects, and instruct the Bank of England to restrict investment in projects that are incompatible with the IEA pathway to net zero by 2050 and ecological limits.

https://www.theccc.org.uk/publication/the-road-to-net-zero-finance-sixth-carbon-budget-advisory-group/

p/ 26 https://www.wwf.org.uk/sites/default/files/2022-05/Aligning-the-UK-Financial-System-to-Net-Zero.pdf 27 https://www.e3g.org/news/investors-managing-3-trillion-in-assets-call-on-uk-government-to-deliver-net-zero-investment-plan/

²⁸https://www.e3g.org/news/leading-companies-call-on-uk-government-to-make-disclosure-of-net-zero -transition-plans-mandatory/

23. Restrictions on private credit creation (which makes up the vast majority of money in the economy²⁹) could also help prevent economic 'overheating' and ensure fiscal space for increased investment in decarbonising homes and switching to renewable energy sources. Such policies could include qualitative and quantitative regulations to restrict credit towards new fossil fuel projects, as well as regulations to restrict credit towards activities such as M&A, to prevent greater market concentration in the energy sector raising prices. As a recent macroprudential bulletin from the European Central Bank states, "quantitative and qualitative restrictions on banks' portfolios could contribute to limiting the build-up of climate risks."³⁰

Climate-calibrated capital requirements

- 24. Climate risks are uniquely complex, involving tipping points and feedback loops, and cannot be quantified, extrapolated from past data or 'efficiently' priced into market activities.³¹ To protect the economy from these risks, the government should work with the Bank of England to adjust capital requirements to increase the amount of shareholder equity that a bank has to hold against fossil fuel lending, to reflect the high risk of such investment.
- 25. In a scenario in which the government bans new fossil fuel projects and restricts fossil fuel lending in line with credible pathways for net zero by 2050, capital requirements could be used as an additional tool to reflect the high risk of *existing* fossil fuel lending, which should be subject to a 150% risk weight at minimum.
- 26. However, in the absence of these restrictions on new fossil fuel projects, lending to such activities should be assigned a 1250% risk weight,³² to ensure that investments incompatible with the IEA's pathway for net zero are funded wholly by banks' own capital, rather than putting the public's deposits at risk. This would mean that every unit of currency of financing provided to new fossil fuel projects be matched by one equivalent unit of currency of financial institutions' own funds. Central banks themselves within the Network for Greening the Financial System,³³ as well as the European Central Bank³⁴ and Bank of England³⁵ are considering the use of climate-calibrated capital requirements.

Tax & subsidies

27. The government should phase out all tax relief and financial support for the fossil fuel industry. Oil and gas companies have enjoyed a special tax regime since 1975,

²⁹ https://positivemoney.org/how-money-%20works/

³⁰https://www.ecb.europa.eu/pub/financial-stability/macroprudential-bulletin/html/ecb.mpbu202110_1~5323a5baa8.en.html

³¹ https://positivemoney.org/2019/10/climate-risk-vs-uncertainty-in-financial-policymaking/

³² https://www.finance-watch.org/wp-content/uploads/2021/11/One-for-One-Joint-letter-BCBS.pdf

³³ https://www.ngfs.net/sites/default/files/medias/documents/ngfs_guide_for_supervisors.pdf

³⁴https://www.ecb.europa.eu/pub/financial-stability/macroprudential-bulletin/html/ecb.mpbu202110_1~5323a5baa8.en.html

³⁵ https://www.bankofengland.co.uk/prudential-regulation/publication/2021/october/climate-change-ada ptation-report-2021

designed to support North Sea investment during an oil price crash. As a result, between 2016 and 2020, oil and gas companies received £9.9 billion in tax relief for new exploration and production, and £3.7 billion in tax relief for decommissioning costs.³⁶ COP26 committed the UK to "phasing down" inefficient fossil fuel subsidies, and in 2016 the UK, as part of the G7, pledged to end most fossil fuel subsidies by 2025. This should be implemented as a matter of urgency.

5. Where and in what areas of policy focus could net zero be achieved in a more economically efficient manner?

Public investment

- 28. In many areas, public investment is the most efficient means of delivering the transition, not only in research and development, but in manufacturing, energy efficiency and electricity infrastructure.³⁷ Public investment in foundational low-carbon sectors such as healthcare, childcare and adult social care is also critical to a prosperous and green economy.³⁸
- 29. The government's Net Zero Strategy set out plans to 'unlock' £90 billion of new investment in the green transition between 2021 and 2025, of which more than £60 billion is expected to come from the private sector.³⁹ But these levels of investment are inadequate to meet the scale of the challenge: £90 billion is the same amount that has been invested in renewables in the previous nine years. Economists have called for the government to upscale public investment in the green transition to at least £30 billion a year to meet the net zero target.⁴⁰

Green Term Funding Scheme

- 30. Green investment could be supported through targeted lending schemes, such as the Bank of England's Term Funding Scheme (TFS). The government should work with the Bank of England to encourage, if not require, private banks to channel lending towards green projects, such as renewable energy infrastructure and retrofits.⁴¹
- 31. The Bank's TFS was adjusted to incentivise lending for specific purposes (particularly small businesses) during the pandemic. Further changes could be introduced to increase green lending to small businesses and households by lowering the cost of

³⁶ Paid to Pollute, 25 November 2021, press release, 'UK has given £14bn in subsidies to oil & gas industry'

³⁷ https://www.nature.com/articles/s41560-022-01081-y

³⁸ https://wbg.org.uk/analysis/fgnd-labour-market-changes/

³⁹ https://www.gov.uk/government/publications/net-zero-strategy

⁴⁰https://www.ippr.org/news-and-media/press-releases/budget-investment-boost-of-33bn-a-year-needed-to-put-uk-on-path-to-net-zero-by-2050-chancellor-told

⁴¹ E. Lonergan, M. Greene. 2020. 'Dual interest rates give central banks limitless fire power'. Retrieved from https://voxeu.org/article/dual-interest-rates-give-central-banks-limitless-fire-power

borrowing for green activities. The Bank of England's Japanese counterpart announced a similar scheme last year.⁴²

UKIB

- 32. The government should significantly increase capitalisation of the UK Infrastructure Bank (UKIB). UKIB could be mission-critical to delivering renewable energy infrastructure as well as efficiency measures such as retrofits, by coordinating stakeholders, channelling public funds and bringing together sources of capital.⁴³
- 33. With the seed funding for the UKIB set currently at only £12bn (with further £10bn in government guarantees) over the next five years, the Office for Budget Responsibility has reported the UKIB would only be able to support £1.5bn a year in investment. This falls far short of £5bn a year on average the UK received from the European Investment Bank (EIB) ahead of the Brexit referendum. The government should therefore commit to significantly increasing UKIB's paid-in capital.⁴⁴ Such funding could be augmented by the Bank of England, building on the historic roles of central banks in supporting successful infrastructure bank projects.⁴⁵

6. How should we balance our priorities to maintaining energy security with our commitments to delivering net zero by 2050?

- 34. The gas crisis, exacerbated by Russia's invasion of Ukraine, has exposed longstanding vulnerabilities in Britain's energy system. Energy price pressures since late 2021 have resulted from Britain's reliance on depleted European gas stocks, high demand for liquefied natural gas in Asia and Latin America, as well as a drop in gas supplies from Russia.⁴⁶
- 35. Longer-term, the UK's reliance on imported fossil fuels for heating and electricity generation, combined with a lack of storage capacity (the UK stores gas equivalent to just 12 days of average demand⁴⁷), makes the UK particularly exposed to changes in gas prices, with the cost of gas four times higher in January 2022 than a year earlier.⁴⁸ 85% of the recent rise in electricity prices is due to gas.⁴⁹
- 36. The volatile nature of oil and gas will be a long-term feature of global energy markets, and price fluctuations should be expected regardless of the speed of the energy transition. At the same time, climate change and ecological breakdown are bringing

⁴²https://www.bloomberg.com/news/articles/2021-06-18/boj-announces-new-steps-on-climate-change-stands-pat-on-rates

⁴³https://9tj4025ol53byww26jdkao0x-wpengine.netdna-ssl.com/wp-content/uploads/UK-Infrastructure-Bank-Built-Environment-roundtable-E3G-Briefing-Paper.pdf

⁴⁴https://9tj4025ol53byww26jdkao0x-wpengine.netdna-ssl.com/wp-content/uploads/UK-Infrastructure-Bank-Letter-April-2021.pdf

⁴⁵ https://www.ucl.ac.uk/bartlett/public-purpose/publications/2018/aug/bringing-helicopter-ground ⁴⁶ https://www.opendemocracy.net/en/oureconomy/britains-energy-crisis-has-been-decades-in-the-mak ing/

⁴⁷https://questions-statements.parliament.uk/written-questions/detail/2019-02-11/HL13575

⁴⁸https://www.ons.gov.uk/economy/inflationandpriceindices/articles/energypricesandtheireffectonhous eholds/2022-02-01

⁴⁹ https://ember-climate.org/commentary/2022/01/14/uk-electricity-prices-fossil-gas/

- us into an era of long-term instability and uncertainty, threatening the basic conditions for price and financial stability.⁵⁰
- 37. The best way to protect households from volatile energy prices is through reducing our dependence on oil and gas. The UK is particularly exposed to changes in gas prices, with the cost of gas four times higher in January 2022 than a year earlier.⁵¹ As the Climate Change Committee makes clear, "any increases in UK extraction of oil and gas would have, at most, a marginal effect on the prices faced by UK consumers in future".⁵² Newly extracted fossil fuels will most likely be sold to the highest bidder on international markets, doing little to support domestic energy supply.
- 38. The new licensing round for new oil and gas exploration in October 2022 directly undermines the government's climate goals. In May 2021, the International Energy Agency warned that all investment in new oil, gas and coal supply must stop this year if the world is to reach net zero by 2050.⁵³ In addition, as such projects take many years to develop, they will not help to fill energy supply gaps in the short term, nor stabilise prices. As IEA forecasts make clear, any development of new fossil fuel sites will cause the further lock-in of both pollution and stranded assets, increasing transition risks for all oil and gas investments (not just new ones).⁵⁴
- 39. Offshore wind is now amongst the cheapest forms of electricity in the UK, with onshore wind even cheaper, ⁵⁵⁵⁶ and estimates suggest that all UK homes could be powered with offshore wind for £50 billion. ⁵⁷ Moving at an urgent pace with significantly higher levels of investment, the energy system could be electrified with renewable sources within one to two years.
- 40. Analysis from Carbon Brief has shown that there are 649 individual onshore wind and solar projects that have already been granted planning permission, but are not yet built because of the lack of Government support to bring them to the market.⁵⁸ If built, these projects could quickly generate more energy than the UK is currently importing every year from Russia.⁵⁹ The lack of investment in onshore wind which has twenty

⁵⁰ https://eprints.soas.ac.uk/35496/1/The%20Price%20of%20Hesitation FINAL-New.pdf

⁵¹https://www.ons.gov.uk/economy/inflationandpriceindices/articles/energypricesandtheireffectonhous eholds/2022-02-01

⁵² https://www.theccc.org.uk/publication/letter-climate-compatibility-of-new-oil-and-gas-fields/

⁵³ International Energy Agency, 'Net Zero by 2050: A Roadmap for the Global Energy Sector', May 2021: https://www.iea.org/reports/net-zero-by-2050

⁵⁴ https://www.greenpeace.org.uk/wp-content/uploads/2022/02/zeroing in investor briefing.pdf

⁵⁶ https://www.carbonbrief.org/wind-and-solar-are-30-50-cheaper-than-thought-admits-uk-government ⁵⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/9 11817/electricity-generation-cost-report-2020.pdf

⁵⁷https://www.theguardian.com/environment/2020/oct/06/powering-all-uk-homes-via-offshore-wind-by-2030-would-cost-50bn

⁵⁸https://inews.co.uk/opinion/fracking-onshore-wind-boris-johnson-uk-weapon-against-vladimir-putin-1 506705

⁵⁹https://inews.co.uk/opinion/fracking-onshore-wind-boris-johnson-uk-weapon-against-vladimir-putin-1 506705

times more supporters than opponents - is a serious failing of the current Energy Strategy. ⁶⁰

41. Renewables and efficiency measures are also much more popular than increasing domestic gas production. Net zero is supported by voters across the political spectrum. Analysis by Onward in April suggested that scrapping the net zero target would cost the Conservative Party 1.3 million votes in the next election. A September poll by Renewable UK showed that there is strong support among Conservative voters for solar (89%), offshore wind (88%) and onshore wind (83%). In November 2021, 61% of 2000 UK adults surveyed by Opinium Research were in favour of 'stopping banks, insurers and other private financiers from supporting and profiting from fossil fuel extraction', while only 9% opposed such measures.

30. Is there a policy idea that will help us reach net zero you think we should consider as part of the review?

Green mortgages

- 42. The government should provide retrofit grants for poorer households, and work with the Bank of England to offer cheap lending for retrofit measures. The New Economics Foundation (NEF) estimates that upgrading the UK's entire housing stock to EPC Band C by 2030 requires a total spend of £35.6bn over a five-year period (2020/21-2024/25), which means significantly upscaling both public and private investment.⁶⁵
- 43. The government should offer full grants to cover the costs of retrofitting fuel poor households. It should also explore reforms to the mortgage market to incentivise lending for retrofit measures and reduced interest rates for efficient properties. The Bank of England could play a critical role in the green mortgage market through its credit guidance policies such as its Term Funding Schemes, which could ensure low, or even negative, interest rates for improvements which reduce fossil fuel usage, such as retrofits or solar panels. As NEF has proposed, the government should look into a national loan guarantee scheme, an interest rate offsetting scheme, and favourable capital treatments for green mortgage loans.⁶⁶

⁶⁰ https://www.greenpeace.org.uk/news/onshore-wind-power-popularity-public-opinion/#:~:text=Most% 20people%20don't%20realise%20how%20popular%20onshore%20wind%20is&text=73%25%20said %20they%20did..people's%20guesses%20were%20too%20low.

⁶¹ https://www.independent.co.uk/news/uk/government-britons-kwasi-kwarteng-yougov-qatar-b205195 2.html?utm_source=Economic+Change+Unit&utm_campaign=30cc7ce0e7-Biden_COPY_01&utm_medium=email&utm_term=0_6101fe9ecd-30cc7ce0e7-207781818&mc_cid=30cc7ce0e7&mc_eid=71915449d8

⁶² https://www.ukonward.com/reports/taking-the-temperature/

⁶³ https://www.renewableuk.com/news/615931/Polling-in-every-constituency-in-Britain-shows-strong-support-for-wind-farms-to-drive-down-bills.htm

⁶⁴ https://positivemoney.org/2021/11/6-in-10-brits-want-to-end-fossil-fuel-finance/

⁶⁵ https://neweconomics.org/uploads/files/Great-Home-Upgrade-Policy-Briefing_September-2021_final_pdf

⁶⁶ https://neweconomics.org/uploads/files/Great-Home-Upgrade-Policy-Briefing September-2021 final .pdf