



A discursive field of contested ethics: Reporting the UK's blue economy in the making

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Abstract

This paper analyses newspaper coverage of ‘blue economy’ in the UK 2012–2020. It elaborates on Germond-Duret and Germond’s (2022) finding that UK media published a dominant development discourse concerning the UK’s marine space without reflecting on the risks of growth agendas. Articles from UK print media featuring ‘blue economy’ were compiled from LexisNexis then analysed to establish patterns of publishing, the investors, investments and projects reported, the experts cited and their statements on blue economy. Analysis reveals no sustained coverage, little that communicated with a national audience, little investigative reporting, and no predominance of London-based newspapers in news production. Reporting on blue economy was sporadic until a surge in 2020 that coincided with efforts to secure investments through local growth plans. Newspapers registered this buzz of activity, collecting statements from actors who used business ethics to express the legitimacy of their planning to build what they called a ‘blue economy’ even though this looked more like ‘blue growth’. A second group of actors including the Scottish Government announced plans to build a ‘sustainable blue economy’. These actors used the ethics of regional development, achieving net zero and protecting, enhancing or restoring ocean environments. Journalists reported critical views on these plans: inadequate attention to environmental protection, investment in activities seen as environmentally unsustainable or investments with limited regional development. Thus, analysis of statements on ‘blue economy’ reveals a discursive field featuring a confusion of contested ethical claims. This paper identifies the UK’s fragmented newspaper landscape and new architecture of public–private enterprise partnerships as important contexts shaping media engagement with blue economy.

Keywords Blue economy · Enterprise partnerships · Transition making · UK media · Urban ethics

Introduction

This paper reports research into reporting of the making of blue economy (BE) in UK newspapers, 2012–2020. It builds on the research of Celine Germond-Duret and Basil Germond (2022) who reported a frame analysis of the use of BE in UK newspapers. Noting the important role mass media can play in efforts to transition towards a sustainable society, they find that “the blue economy is largely framed in terms of economic opportunities and weak sustainability, and treated in a very factual, non-critical way” (Germond-Duret and Germond 2022: 193). They see this as the result of the development discourse that dominates the UK’s marine

space, and warn that the coverage lacks attention to risks of unchecked growth. In the UK, BE is framed as economic opportunity, and the sustainability dimensions of the term receive little attention. There is an important contribution to the field. It builds upon Germond-Duret’s (2022) earlier finding that BE has gained wide support from its entanglement with three discourses – placelessness of the sea, development and sustainability – the first construing the sea as an exploitable space, the second legitimising specific development, and the last justifying sustainable development. Germond-Duret and Germond (2022) reveal media reporting of BE to be dominated by development discourse aimed at resource appropriation and exploitation.

This research aims to contribute to a political ecology of BE-making in the UK. BE is widely discussed across the social sciences using political ecology approaches and analysis of discourse in justice terms (Bennett 2018; Garland et al. 2019; Bennett, Blythe et al. 2021; Armstrong

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2022; Germond-Duret et al. 2023a, b); Heidkamp, Graland Krak et al. 2023; Heidkamp, Garland et al. 2023). The concept of BE has its origins in a UN formulation of 2011 that explicitly relates the concept to sustainable development (Garland et al. 2019; Germond-Duret et al. 2023a, b). Nevertheless, marine social scientists have detected multiple BE discourses (Silver et al. 2015a, b; Silver et al. 2015a, b; Voyer et al. 2018), even a de-growth version applied to selected sectors (Hadjimichael 2018), and BE discourse remains central to agendas and research (McKinley 2023). As society takes aim at a socially equitable and ecologically sustainable BE, social scientists have not only charted how transformative decision-making proceeds (Blythe et al. 2021) but sketched in how to build justice into ocean governance (e.g. Bennett, Blythe, et al. 2021). Building sustainable BE requires new tools and ways forward, such as those advanced in the collection assembled by Saunders et al. (2024) but also Transdisciplinary Action Research (Brideau et al. 2023; Heidkamp et al. 2023) or enactive research (Lewis and Le Heron 2023). It also requires attention to ethics (Aschenbrenner 2023a, 2023b). This paper takes an approach designed to examine BE reporting as an ethical field. It asks what practices and claims were used to make and contest BE?

This paper reports analysis of how newspapers reported the making of BE in the UK. The aim is to understand the character of public debate on BE. The research approach follows Dürr et al. (2020) who view ethics as a discursive field in which participants negotiate interests, problematizations, guiding principles and ideals of the good. It does so by following Aschenbrenner and Winder (2023) who propose media, despite its limitations, as such a discursive field of urban ethics. Analysis focuses on the grounds on which actors claim right. That is, it focuses on ethical problematizations and claims-making expressed in media coverage of BE and how these function to either create credibility and support for policy and the apparatus used for decision-making or to delegitimize positions. Ethical framing can legitimise ‘appropriate’ resource use, and ethics can reinforce hegemonic framing for decision-making by forestalling debates about assessment methods (Flannery et al. 2018). Such effects align with ‘post-political planning’ (Swyngedouw 2009): technocratic planning, assumed to be rational, based on consensus-based decision-making and legitimized by participation processes, but in effect marginalizing opposition and foreclosing debate about the purpose of planning (Flannery et al. 2018). While ethical framing of decision-making can legitimise fields of expert knowledge, participation and moral negotiations, it may not remove contestation altogether. Challenges may shift to the ethics of expertise, participation and negotiation (Aschenbrenner and Winder 2023). Ethics may open up new political fields (Dürr et al. 2020; Moufe 2005). So how was BE negotiated in UK media?

Rather than contesting Germond-Duret and Germond’s (2022) conclusions, this paper investigates the roles of UK newspapers in co-producing ethical claims concerning entrepreneurship, technology fixes, competitive bidding, political leadership, nation making as well as environmental protection and sustainability. By relating these ethics to theorized roles for media in societal transformation projects, the paper points to the roles media play in the development agenda dominating the UK’s marine space. It first identifies the contexts shaping the discursive field of BE ethics in UK media. These include the institutionalization of marine governance, and of BE as investment project within public–private enterprise partnerships across the UK. Additionally, media capabilities are constrained in an increasingly fragmented UK newspaper landscape. The paper then investigates the assembling of BE in UK media by identifying geographies and temporal patterns in coverage. It identifies the experts cited and what they said about BE, as well as the investors, investments and projects that were reported. It then discerns BE discourses reported in the media and the ways these are ethically constructed and contested. It would be reasonable to expect UK media to have covered the institutionalization of BE in the EU and the UK. Newspapers may have monitored stakeholder participation and public reactions, and assembled discourses to convey the new policy ideas and governance practices, while focusing on investments and economic growth opportunities. How much room was there for critical comment?

Transition making in the UK: context and expectations

The UK is a special context for the making of BE and we should expect this to have shaped the ways in which media reported the development of this concept. First, the UK transitioned away from coastal planning to Marine Spatial Planning (MSP) between 2007 and 2011 in response to EU impulses (Winder 2023). This involved establishment of new practices of planning, as well as new institutions and at different times around the coast. Second, it also transitioned away from regional development, notably by abolishing regional development boards in 2012 and replacing them with public–private partnerships to promote regional growth (Bailey and Budd 2016). Third, under the influence of the EU’s Blue Growth Strategy 2014–20 (Winder and Le Heron 2017), some UK coasts and seas, but not all, became marked by BE investments and projects. Fourth, BE practices operate within an established geography of uneven development in UK coastal space, so that varied reactions to the new concepts were likely across space. Fifth, in the shifting UK media landscape, regional and local newspapers are in crisis, raising issues of what kind of coverage for which publics came with media reporting of BE. Together, these contexts present special challenges for reporting BE and should shape our expectations of that reporting.

Marine spatial planning

Following the European Union's adoption of MSP in 2007 (Douvere and Ehler 2009a and 2009b; Kidd and Ellis 2012), the EU introduced frameworks to facilitate development of marine capabilities for its Blue Growth and Sustainable Seas aspirations. The EU's Marine Strategy Framework Directive 2008 required national assessments of marine waters, including economic, social and environmental analysis of pressures and impacts from maritime activities, by mid-2012, and national marine plans by 2021. The EU developed MSP as ecosystem-based planning for coastal, sea and ocean management (Douvere and Ehler 2001) guided by ecological principles and monitoring (Knol 2013) as part of its Sustainable Seas agenda.

The UK was a leader in the institutionalization of MSP (Smith et al. 2012; Winder 2023). Before the EU adopted MSP, the UK Government experimented with MSP pilot projects in the Irish Sea and Pentland Firth. Gordon Brown's government oversaw a further pilot project in Orkney waters, and established the Marine Management Organisation (MMO) to coordinate MSP in UK waters. Marine Strategy Regulations followed in 2010. The UK Marine Policy Statement 2011 set a framework for preparing MSPs. By 2016, 50 Marine Conservation Zones (MCZ) were declared in English and Welsh waters. MMO established 11 plan areas and has developed plans for each in turn (MMO 2011). Priority went to the East Inshore and Offshore areas where it prioritised conservation and offshore wind energy (OWE) in conjunction with development of OWE services in Humber's marine cluster (Dalton et al. 2019; Dawley 2014; Essletzbichler 2012). Planning turned to South Inshore and Offshore areas, where the EU's port alliances, Blue Growth strategy for 2014–2020 and European Regional Development Fund support fostered cooperation among port authorities in Belgium, England, France and the Netherlands (Winder and Le Heron 2017: 6–7). The Marine (Scotland) Act 2010 and National Marine Plan 2015 created a similar framework for Scotland. Marine Scotland drafted plans for 11 marine regions with Advisory Marine Planning Partnerships to ensure local participation and links to territorial authorities. It first completed plans for Clyde and Shetland Islands and its MSP making was well ahead of work in England's North West and North East, in Wales and Northern Ireland. MSP required new administration in the UK, and most of this legislation was complete before the Conservative Party's return to power in 2011.

With the UK's national marine plans largely in place in 2016, we might expect the UK's marine environments to be properly regulated: use conflicts and adverse environmental effects are dealt with under MSP institutions. Now that may be the case, but critical scientific engagement with MSP has emerged both within the UK (Ritchie

and Ellis 2010; Flannery and Ellis 2016; Flannery et al. 2018) and elsewhere (Boucquey, Fairbanks et al. 2016; Tafon 2018; Bennett 2019a and 2019b; Aschenbrenner and Winder 2019). Researchers note issues of exclusion, non-participation and limited participation of citizens in plan making. Their research on MSP uses political ecology approaches and acknowledges contestation in coastal and ocean environments as well as social interests. One recent assessment of MSP summarises the potential for conflict:

“...MSP became an instrument of sectoral planning focused on zoning and, as Trouillet (2020) highlighted, MSP takes on the appearance of a process benefiting for all, reinforced by a consensual narrative, when in reality MSP responds to injunctions emanating either from sectoral economic logics or from conservationist objectives and rarely both.... These negative evaluations are leading to growing scepticism among scholar communities that MSP is not facilitating a paradigm shift towards publicly engaged marine management, and that it may simply repackage power dynamics in the rhetoric of participation to legitimise the agendas of the dominant actors (Flannery et al. 2018).” (Guerreiro 2021: 12).

Although the institutionalisation of MSP involved an apparent division of responsibility in governance, in which MSP managed environments while BE developed (sustainable) economies, roles were more entangled than separate. In satisfying EU and UK reporting expectations, MSP in the UK requires study of economic impacts of Marine Protected Areas (MPA), cruise ship and OWE developments, and marine cluster building related to marine science. Indeed, the UK's MMO expects research on the socio-economic effects of MCZs and it therefore provided evidence-based guidelines for marine and terrestrial planners working to ‘maximize socio-economic benefits’ from their planning (MMO 2011). Consequently, UK MSP is entangled in economic assessment practices, including the economic rationalization logic developed around BE (Winder 2023). Its MSP must manage environments for economic outcomes as well as biodiversity and conservation. MSP is meant to be a servant of both the overarching development and sustainability discourses identified by Germond-Duret (2022). That raises the issue of whether MSP experts are present in media reports of BE.

Blue economy, devolution and enterprise partnerships

The EU declared its Marine Strategy Framework Directive in 2008, but it was not until 2014 that it announced its Blue Growth Strategy 2014–2020 (Fig. 1). The time between 2008 and 2014 was not wasted. Unlike MSP, BE did not

require new governance structures. It did require new scientific definitions, and as early as 2011, scientists, and especially scientists based in the UK and Ireland, were defining BE (Morrissey et al. 2011; Morrissey and O'Donoghue 2012 and 2013; Doloreux et al. 2016), and relations between BE and regional development. In the EU and UK, BE was envisioned as compatible with existing regional development institutions and goals. For example, Morrissey (2015) extended BE thinking by relating it to not only efforts to define maritime clusters in the EU, but also regional data on deprivation and employment in England. What would be required would be new funding, new technology and new business alliances, and for this, the EU framework was its Blue Growth Strategy.

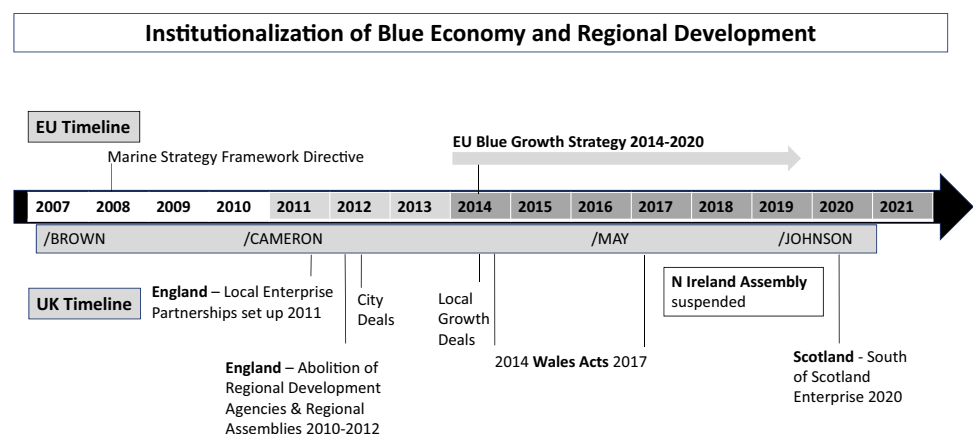
These foundations notwithstanding, the UK transitioned away from regional development between 2010 and 2014 (Fig. 1). Notable here was the abolition of England's nine Regional Development Agencies (RDAs) in 2012. The move aimed to reduce the government deficit since there would be no immediate replacement for central government spending through RDAs. Conservative Governments aimed to shift responsibility for economic development in England to local enterprise partnerships (LEPs), the first of which were formalized in October 2010. These self-organized local initiatives, partnered local governments with private enterprises to plan for and invest in economic development and growth. Initially supplied with no central government funding, LEPs could later access funds through competitive bidding to the UK's existing Local Growth Fund. This required a realignment of EU Structural and Investment Funds for the purpose. Subsequently, the Westminster Government created further funding vehicles for LEPs: City Deals and Local Growth Deals, also contestable and negotiable. This process institutionalized new practices for planning and funding local development. It fragmented the existing English institutions, and while the institutions in Scotland (Scottish Enterprise, Highlands and Islands Enterprise, since 2020 also South of Scotland Enterprise) and Wales (the Welsh Government's

Department of Economy and Transport) remained they have adapted to the new funding rules. Suspensions of the Stormont Assembly may have obstructed arrangements in Northern Ireland.

In the UK, BE has been entangled with institutional transformation of regional development, with implications for managing BE. There is increased reference to environmental and social sustainability in development decisions, but the extent to which the new economic planning is subject to assessments of biodiversity, conservation, deprivation and social sustainability is less clear. Some BE projects – OWE most clearly – can span the sustainability and development discourses identified by Germond-Duret (2022) since they reduce greenhouse gas emissions. Others, like fishing, aquaculture or carbon capture and storage (CCS), may not.

It remains to be seen what the implications of this were for media coverage of BE. BE may have gained enhanced media attention because of its potential role in LEP plan making and funding deals. Equally, the prospects of a nation-wide priority for BE in the UK may have been reduced, simply because of the fragmentation of regional development institutions and the delegation of planning to local levels. Nevertheless, UK media may have imbibed the atmosphere of investment, coalition making and competition emerging from the new LEPs. That must have been a heady mix when combined with opportunities for devolution, and the Conservative governments' redirection of EU and other regional development funds. That atmosphere did not necessarily break with established economic growth terminology but certainly focused on the scarce ingredient: investment. Since the criteria for assessing LEP projects were primarily economic and business criteria associated with local 'economic sustainability' – these were enterprise entities after all – it would be refreshingly surprising to find coverage of BE replete with such terms as biodiversity, ecosystem, climate change or environmental let alone social sustainability. It could be that when reporting BE, UK media ignored 'ecosystems' within UK waters as well as coastal

Fig. 1 Institutionalization of Blue Economy and Regional Development



communities, and instead reported only specific coastal regions where investors were active. From the timeline of BE making (Fig. 1) we might expect media coverage of BE in the UK to begin after 2014 when LEPs were institutionalized and funding began to be available. We might expect BE to be constructed by politicians and economic and business professionals with little input from environmental experts.

Uneven development of coastal space

The UK's diverse, dynamic and politicized marine and coastal spaces constitute a distinctive and varied context for BE development (Winder 2023). The UK's coastal and marine areas are complex contexts for regional and marine planning (e.g. for biodiversity conservation, erosion or tourism and recreation), and constitute distinct frontiers with different investment-risk-opportunity profiles (e.g. for the EU in identifying the economic and environmental effects of the planning and assessment practices used in these settings). Opportunities will be taken-up differently around the UK coasts, resulting in further uneven development. Consequently, we should ask where was this development and were there diverse responses to these developments, varied locally, and ranging from enthusiastic support for some local initiatives, through silence to uproar or protest? Further, the potential achievements from the EU's BE and MSP frameworks are compromised in the UK by a suite of political and policy challenges now common across the EU, including austerity (Pike et al. 2016), devolution (Bailey and Budd 2016), EU disintegration and legitimization issues confounding regional coordination and planning (Winder 2023). Therefore, we should look to see whether critique of the new planning systems organising BE has emerged in the press, or whether media are silent on such matters.

Changing media landscape

The EU's media landscape is dynamic (European Parliament 2019), and, in particular, there is a local and regional news crisis in the UK (Firmstone 2016). The rise of digital news services and the related collapse of newspaper circulation, advertising revenue and subscription numbers has restructured the UK media landscape. This manifests as the closure of many local newspapers or their amalgamation into newspaper chains, and as job losses reducing investigative capacity in the sector. Writing for *The Guardian*, journalist Mark Sweeny (2023) reported that around 300 local newspapers closed operations in the last decade due to dramatic collapses in print advertising and circulation numbers. Due to their consolidation of local entities, media companies Reach, Newsquest and National World now control most of the UK regional newspaper market. Job losses at Reach, "the

UK's biggest regional and local newspaper owner" (Sweeny 2023) whose titles include not only the *Birmingham Mail*, *Liverpool Echo* and *Manchester Evening News* but also the *Mirror* and *Express* prompted Sweeny's article. In addition, Sweeny reported asset value at media companies JPI (former owner of *The Scotsman* and *Yorkshire Post*) and the *Daily Mail* (former owner of *Leicester Mercury* and *Nottingham Post*) disintegrating in 2023.

The transition-making literature does not theorize media roles. The multi-scale framework for analyzing transformation processes (Grin et al. 2010; WBGU 2011: 100) calls for pro-environment action and specifies transformation pathways, but has no place for media in its conceptualization of transition making. This is not so in the communications literature, in which media are expected to deliver news to a potentially engaged public as a vital service to governance, politics and societal change. Nevertheless, different media have different models. For example, the 'modern newspaper' aimed to report all of the news that is important to a specific community thus 'mapping the social world' (Barnhurst and Nerone 2001; Winder 2010: 142–146). In contrast, 'global media' (Castells 2000) aim to serve global or national publics, while other media now serve diverse publics ranging from local or regional to professional or interest group. Some media aim to form a partisan public using practices such as organizing and reporting forums, frame setting or critique and bias in the selection and reporting of events. Correspondingly, the capacities of UK newspapers vary enormously, and may be in decline.

In this context, what UK local and regional newspapers can deliver will depend on their capabilities: they should shape the role that they can perform. Firmstone (2016) framed newspaper roles in democratic society as either informational, representative, watchdog or campaigning. Firmstone's (2016) interviewees viewed UK local news media as becoming more sensational while supplying less information, so that newspapers were less likely to engage with complex local issues. Further analysis of themes covered and media roles taken up in reporting BE may shed light on what roles UK media have been playing, but establishing how they gather and produce news is relevant in assessing BE coverage. Did UK media investigate BE projects or did they inform readers from tracking announcements and events?

Discourse and ethics

To summarise, these contexts raise questions concerning discourse and ethics in media coverage of BE. Which discourses were used to discuss BE and how were they used? Tensions may arise among users as they share coastal space, so did reporting reflect contestation over BE transition-making activities? If so, what ethical claims were used against

BE and which ethical claims were used for it? Who was reported on BE and did this amount to an open or closed shop? Was this a set of expertise for development, for sustainability or for both? How did media produce the news, by tracking events and announcements to inform readers or by investigating issues and ethics of BE? The UK took up BE with energy so we might expect full reporting and facilitating roles in UK media: but perhaps also shifts in narratives and coverage as the political agenda transformed and as the media crisis unfolded? Did newspapers reflect regional publics and their priorities in BE making or was BE represented as a matter of national development or sustainability?

Methodology

Data collection and analysis for this paper were performed by the author. The data collection strategy used is similar to that of Germond-Duret and Germond (2022). A search was conducted in the LexisNexis database for articles published between 1 January 2012 and 31 December 2020 that used the expressions ‘blue economy’ and ‘blue growth’ in the title, heading or text. Note that almost all articles contained ‘blue economy’. The search was confined to local, regional and national media, and therefore to newspapers, broadsheets and tabloids. Only articles dealing with the UK and its waters were included. With the expectation that BE coverage is related to the development of enterprise entities in the UK in mind, I chose to start the search in 2012. The full text of each article was collected for analysis and summarized using spreadsheets. After manually removing false positives, the resulting database consisted of 104 articles including duplicates (Appendix 1), 79 articles without. This dataset is different to the one used by Germond-Duret and Germond (2022) who report 101 articles 2010–2020 using a slightly different search protocol.

This research uses the database in different ways. One aim of this research was to map the publications on BE, and, for this purpose, I retained both duplicates and the articles produced by news agency services and by professional journals since these give a better indication of the circulation of content. This enabled analysis of the geography of news production on BE. For the analysis of content, I concentrated on the 79 separate articles. A list of BE projects and investments was constructed. This was analysed to reveal stakeholder and investment patterns and the relative importance of different BE projects. I also compiled a spreadsheet of experts cited in the articles, their statements, and the institutions involved. These were analysed to reveal the expertise used in the media to speak about BE. What they said about BE was then analysed to reveal expert ideas about BE, why it is important, and what ethical statements about BE they made. These statements were then compared and related to the three discourses

of ‘development’, ‘sustainability’ and ‘placelessness’ identified by Germond-Duret and Germond (2022). Finally, critical expertise was collected and summarized to reveal how much critique there was and what it focused on. Here attention focused on what was seen as unethical. Together, this approach allows stakeholder groups and their associated discourses of BE as well as the extent of contestation over what BE should be to be identified and discussed. In what follows, this paper reports on patterns of media coverage, news production, and the discursive field produced.

I have not interviewed the journalists involved, nor have I researched the newsrooms of these newspapers. My positionality is as a reader of complete texts rather than the editing process. That means that I can report patterns in the texts, including who was cited, what they said, when and where this occurred, and who had no voice. I can know what triggered the report, in terms of its relation to an announcement or an event, but not how this fits with editorial policy. I can identify stakeholders and experts being brought together to co-produce discourses of BE projects. I can identify reporting of critical voices and what they said. From this work, I can produce geographies of news coverage, production, distribution and content from which I can outline constraints on and patterns in media agency. I can thus map the discursive field around BE as produced by this reporting. My aim is to understand what was produced, not to say that media should report in a particular way.

Media coverage

In total, UK media produced 79 separate articles featuring ‘blue economy’ and ‘blue growth’ and published them 104 times in 54 separate media between 2012 and 2020 (Appendix 1). Germond-Duret and Germond (2022) found that UK media reporting of BE began before 2012. In the dataset used here, reporting nudged over five articles per year only in 2017 and surged to a peak of over 40 articles in 2020 (Fig. 2). While reporting on BE was widespread within the UK (Fig. 3), the map also reveals other patterns. Very few news stories circulated widely to reach a national public. London-based media did not produce most of the articles mentioning BE. Generally, newspapers with large circulations paid little attention to BE, while local newspapers tended to use these keywords sporadically. BE was picked-up by some regional newspapers, but not all. Newspapers based in Scotland published about half of the articles while media in Wales and Southwest of England were active. It is perhaps unsurprising that media based in the Midlands failed to report BE, but the same was true for some coastal cities including Belfast, Liverpool and Newcastle. The dataset contains no reporting from newspapers based in the English Midlands, Northern Ireland or on England’s Northwest coast. In what follows, illustrative

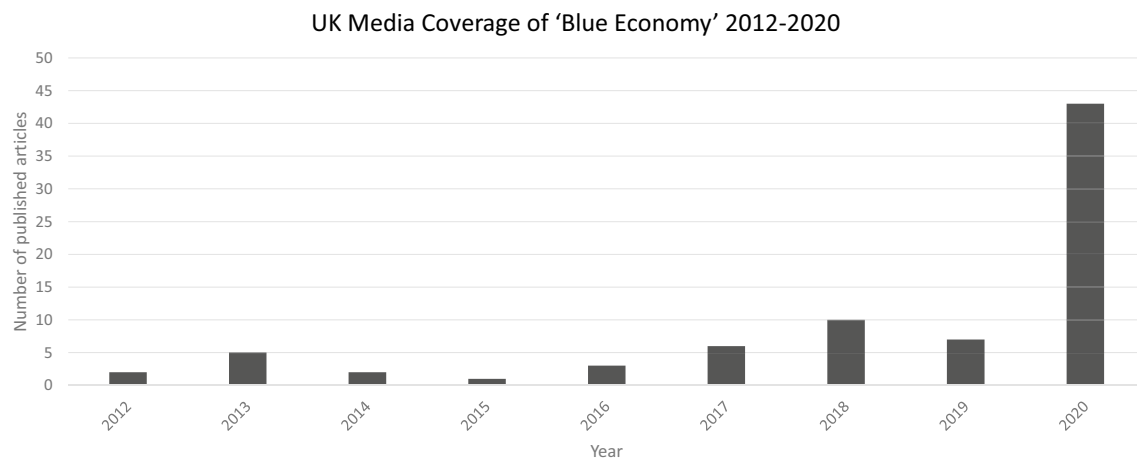
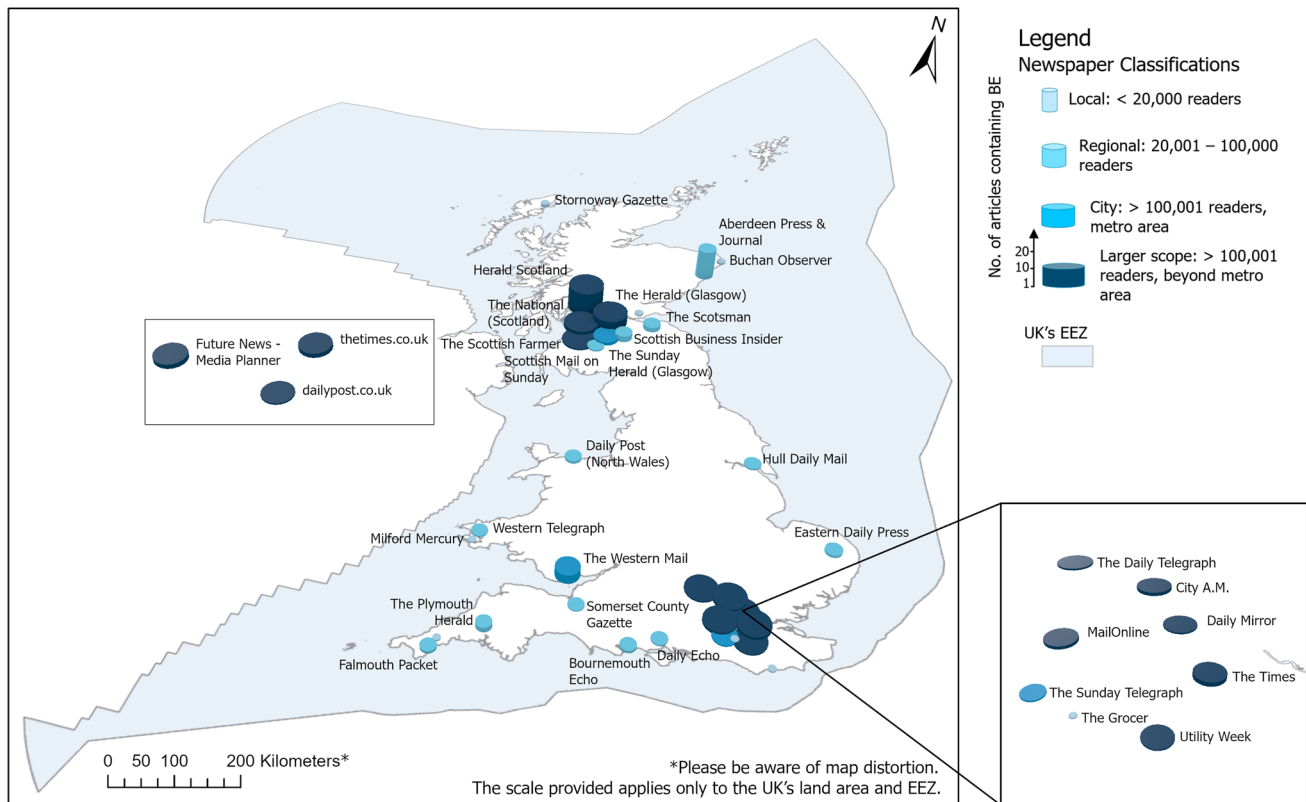


Fig. 2 UK Media Coverage of 'Blue Economy' 2012–2020

Distribution of UK Media's 'Blue Economy' Publishing 2012 - 2020



Note: **the 104 articles mapped include all duplicate articles.** Source: LexisNexis Database.

Fig. 3 Distribution of UK Media's 'Blue Economy' Publishing, 2012–2020

examples of news story circulation and patterns of reporting in particular newspapers are used to elaborate on these geographies of the reporting.

Very few articles circulated to a UK-wide audience through these media. Those that did seemed to be relevant to a national

readership or to regional readerships. For example, in late 2017 and early 2018, Prince Charles called for action on plastic pollution and warned that eating fish meant eating plastic too. The Prince's communications were reported in *The Times* (articles 19, 20) and *The Daily Telegraph* (article 22)

but not in regional or local media. In contrast, the story that a ‘remote’ North Wales island with four inhabitants is the ‘first in world’ to be powered by wave energy was published by several regional newspapers as well as major dailies in November 2020. The *Daily Mirror* and *Mail Online* reported this story, but also *Daily Post (North Wales)*, *Herald (Scotland)*, *The National (Scotland)* and *The Western Mail* (articles, 87–89 and 91–94). These examples warn that print media did not offer anything resembling coherent national attention to BE but that networked production did make widespread distribution of some stories possible.

Reporting on BE in large circulation newspapers was limited. The search found no articles published by *The Guardian* using the keyword ‘blue economy’. Yet, since 2018, *The Guardian* offers extensive reporting on UK coastal and marine affairs with the support of the David and Lucile Packard Foundation for the newspaper’s series ‘Seascape: the state of our oceans’. In contrast, *The Times* and its online version published five separate articles (7 times) mentioning BE. The group called for ‘Britain to lead in saving our seas’ (article 3) and warned of plastic pollution (articles 19, 20) but it was not until 2019 that reporting construed BE as investment in regional economies and industries (articles 40, 46). Commentary on a project to attract workers for the Scottish salmon industry (article 85) rounded out a transition to thinking about BE as economic projects. Thus, reporting in the *Times* made room for Prince Charles to express views on policy for the global and national scales, but was silent on EU and British government roles in making BE as economic project.

Generally, large London-based newspapers reported sporadically on BE, but they did publish commentaries on BE. For example, *The Sunday Telegraph* (article 23) reported that together BE, Brexit and forging new maritime industries could be ‘more than fish and chips’, while *The Mail Online* (articles 79, 80) warned that expansion of Scotland’s salmon industry could end in disaster. However, London was also home to media engaged in campaigning on BE, as illustrated by *City A.M.’s* (article 54) assertion that free ports could revitalise the UK’s coastal communities. London-based media displayed varied interpretive stances on BE, ranging from attention to strategic issues to boosterism.

Few of the local newspapers maintained a steady publication on BE. Take for example coverage in newspapers on England’s southeast and Channel coasts. The Norwich-based *Eastern Daily Press* published two articles featuring BE in 2013 (articles 6, 7) announcing the possible benefits for the region, but did not return to the theme. The *Bexhill Observer* (article 30) reported a symposium and exhibition on the sea that mentioned BE. In England’s Southwest, before 2020, only *The Plymouth Herald* reported BE, and then as a marine sciences conference (article 1), a Trade and Investment event that featured BE investment opportunities

in China (article 9), then meetings of marine industry groups in 2017 (articles 16, 18). However, in 2020, local newspapers alerted readers to the economic plans of Great South West partners (articles 51, 52) and urged the UK’s chancellor to approve their bid (articles 63, 66, 68, 69). Here, finally was informational journalism on a specific BE project keyed to announcements by stakeholders. Generally, local papers alerted readers to local events. They published interviews and reporting done locally. Overall, their reporting on these themes was sporadic, and emphasised local matters and perspectives. Rarely was the reporting critical or investigatory.

Some regional newspapers reported BE more extensively than either local or larger circulation media. Most prominent here were the Scottish newspapers *The Aberdeen Press and Journal*, *The Scotsman* based in Edinburgh, and Glasgow-based papers *The Herald*, *The Sunday Herald* and *The Herald Scotland*. Analysis of their coverage reveals different cycles of interest as well as differences in emphasis and interpretation. For example, Edinburgh-based *The Scotsman* presented BE as a matter for Scotland’s politics and politicians (article 24), aided by foreign investments (a European grant to Scottish-based firm Atlantis for tidal power innovation (article 33) or a Japanese investment in Scottish underwater technology projects (article 42). In contrast, together, Glasgow-based papers *The Herald (Glasgow)*, *The Sunday Herald* and *The Herald Scotland* offered a wider range of themes. They reported an inquiry into BE (article 25), scientists working together to back BE (article 39), that Aberdeen was leading in technology ‘to save the planet’ (articles 38, 39), a new renewables hub (article 65) and firms securing funding for technical projects for ‘blue energy’ (articles 43, 88). One article (73) spelled out why Scottish support for its blue economy was justified. This BE reporting also paid attention to the growth opportunities of farming Scottish salmon (article 76) and oysters (articles 47, 48). Salmon farmers pledged to reduce their environmental impact (article 84) but anticipated no problems with further expansion (article 96). While the need to re-wild Scottish seas was proclaimed as ‘A cry for kelp’ (article 53), ‘campaigners’ found new MPAs inadequate for the challenges ahead (article 99). Both the *Herald (Glasgow)* and *Herald Scotland* reported a £70 million plan to benefit coastal communities as BE (articles 58, 59). By 2020, Glasgow newspapers read BE as having economic growth and community development aspects associated with a Scottish (social and economic) sustainability strategy. At the same time, under the same keywords, they reported counter views from environmentalists on the need for marine protection and sea rewilding as well as limits to growth in salmon farming. This was a more rounded discussion of BE than found in many of the other media.

These examples underscore that different newspapers covered BE differently. This reflected both the fragmented media landscape, the geography of BE opportunities and the changing institutional context for BE. In particular, the

reporting in Glasgow shows considerable news production capacity, attention to regional, economic, social and environmental interests, and reflects a high level of political engagement with these topics. Glasgow's regional newspapers covered the politics of making BE in Scotland – as 'national project'. They were interested in the marine resources off Scotland's coasts, and particularly in new valuations for wind farms, aquaculture and tidal power. They were assessing the potential for independence from Westminster based on nationalization of a new 'blue and green (not brown) economy'. They tracked active, devolved political institutions, and their reporting explored how the Scots Parliament and Marine Scotland engaged with environmental and economic issues, all of which they saw as related to BE. They drew attention to marine use conflicts and opportunities, informing, representing and campaigning their regional public. In Glasgow, BE was, all at the same time, about development, about sustainability and not placeless. In Plymouth, by contrast, when BE finally received more than sporadic mention in 2020, it was because local newspapers picked up the buzz of LEP activity to secure investment in a BE project.

News production: events, announcements, experts, investment

Media coverage of BE was predominantly sourced by journalists reporting local events. Generally, local papers alerted readers to local events, which they assembled using interviews and local reporting. This is a legitimate role for local media, and it can be highly informative. For example, a notice of retirement must have triggered an interview with a journalist from which *Hull Daily Mail* published a piece remembering Mark O'Reilly, retiring chair and CEO of Team Humber Marine Alliance (article 102). The article reprises an entrepreneurial story by revealing the work of a centrally placed networker who brought 'key parties together' thus making jobs and industry in Hull. This is a rare example in the dataset of a 'mapping the social world' practice of remembering service to community and business, but it perhaps highlights the importance of knowing how news of BE was produced. Journalists reported BE because they covered specialty events and announcements. Such matters generally meant informational reporting.

BE was associated in UK media with a diverse array of specialty events that journalists reported. It featured in scientific conferences, like the Marine Science Conference in Plymouth 2012 (article 1), workshops such as National Subsea Research Initiative's (NSRI) 'Mastermining workshop' 2018 (article 32), and official opening ceremonies for research and innovation facilities like the Marine Robotics Centre at the National Oceanography Centre, Southampton 2015 (article 10). Government consultations, such as the Maritime 2050 panel, and a consultation on reclaiming Britain's

maritime leadership 2018 (article 23) featured statements on BE by organizers. Industry associations organized fairs like Offshore Europe, an energy exploration and production conference held in Aberdeen 2019 (articles 38, 39). As they gave advance notice of the event, planners of Subsea UK's 16th Subsea Expo scheduled for February 2021 in Aberdeen announced they expected to attract around 200 exhibitors and almost 7,000 delegates (article 78). Events ranged from small meetings and one-off gatherings to much larger sets of activities. For example, UK Trade and Investment's Export Week 2014 featured 11 events, attracted 430 company delegates, and arranged over 670 one-to-one meetings between businesses and China-Britain Business Council (CBBC) staff (article 9). BE was also highlighted at Visit Scotland's year of Coasts and Waters celebrations. Marketing campaigns supported by the Growth Fund advertised West Coast Waters, Stranraer Oyster Festival, Sail Scotland and River of Light, Scotland's boat show held at Kip Marina on the Clyde (articles 49, 50). When *Herald Scotland* reported the Scottish Seaweed Industry Association's 'Kickstarting the Seaweed Economy' conference, Oban in 2020 (article 53) it drew on interviews with participants assembled for the event. In these ways, BE entered UK media through media coverage of 'temporary cluster' events (Maskell et al. 2006; Bathelt and Schultdt 2008) such as fairs that ended up as informational reporting.

BE-related announcements proliferated because the UK Government institutionalized new trade associations, LEPs and competitions for funding. In this context, efforts to form enterprise entities such as a meeting to organise North Sea Marine Cluster in 2013 (article 6) were newsworthy. Likewise, the formation of new industry organisations like Blue Growth UK announced in 2017 (articles 14, 16, 18) brought statements about BE into the press. When established, LEPs attracted attention by announcing progress of their bids for government support, as in July 2020 when the UK and Welsh Governments approved the business case for Pembroke Dock Marine but City Deal support was still pending (articles 63, 64). Even when established but not yet funded, LEPs published to gain attention, as in 2020 when Great South West Partnership published a local growth prospectus (article 51). Such announcements usually required only informational reporting but might include statements concerning BE from other experts besides those responsible for the announcement.

Additionally, BE-related announcements proliferated because permanent institutions made them part of their ongoing activities. Ministries, trade and enterprise associations, commissions, and Environmental NGOs released reports mentioning BE, opened consultations, or launched inquiries. When the UK's Environmental Audit Committee began to audit the UK's sustainable seas in 2018 (article 27) it certainly expressed its aim to assess how and whether BE projects were contributing to sustainability. However, the search discovered no further content on this audit. Officials could be

relied upon to announce funding success, as in 2019 when Scottish Enterprise, the Scottish External Affairs Secretary and Subsea UK announced funding for six projects in its blue economy agenda focus (articles 42, 43, 44, 46). The reformed legacy institutions of UK regional development the Highland Council, Highlands and Islands Enterprise with the University of the Highlands and Islands, mentioned BE in their ongoing reporting of regional development (article 13). Moreover, reactions to the announcement of Stornoway Port Authority's 20-year master plan, featuring a hydrogen-driven energy hub and infrastructure investment, were positive but framed in both sustainability and regional development terms (articles 101, 103). Crown Estate Scotland (CES) made investments, strategy and opinion known through announcements to demonstrate its contributions to society. Covering these established institutions involved established reporting repertoires related to both supplying information and engaging comment from observers.

Generally, local reporting shaped what was published on BE. A feature of UK media coverage of BE was the extensive use of experts in reporting. A total of 171 separate, named experts were cited in the 79 articles studied (Fig. 4). While some experts were quoted more than once, the diagram gives a reasonable indication of the types of expertise associated with BE. Business, industry and economy leaders were overwhelmingly (60%) present. People from business, exclusively either from marine engineering and bio-tech enterprises or business service companies operating in the marine sector made up 41% of those cited. These were chief executives, owners, directors and managers. Another 10% were speakers for chambers of commerce, or producer, business and industry groups. Experts from the new enterprise services – enterprise and cluster management agencies, city deal and innovation management firms – made up a further 9%. Politicians and officials from all levels of government comprised 27% of those cited, and staff of public agencies providing regulatory, tourism, heritage or trade and investment services a further 5%. Experts supplying knowledge services from universities, research institutes and science institutions made up 11% of experts. Finally, 6% of the expertise hailed from environmental, community and development NGOs and agencies. Here is an indication that environmental and social expertise was not regarded as highly relevant to understanding or reporting BE. Altogether, the expertise that made the reporting of BE possible and gave it a lot of its legitimacy stemmed from business, business management, economics and engineering.

Further, the voices were almost entirely institutional. It is true that some citizen voices did appear in BE related articles. Stand out instances include a wild swimmer cited when reporting Visit Scotland's year of Coasts and Waters (articles 49, 50), a retired biochemist and a military veteran-turned-farmer quoted in Sarah Sands' report on Scotland's salmon industry (articles 79, 80) and an apprentice commenting on hi-tech work experience in a piece on Pembroke

Experts Cited on Blue Economy in the UK Media by Sector 2012–2020

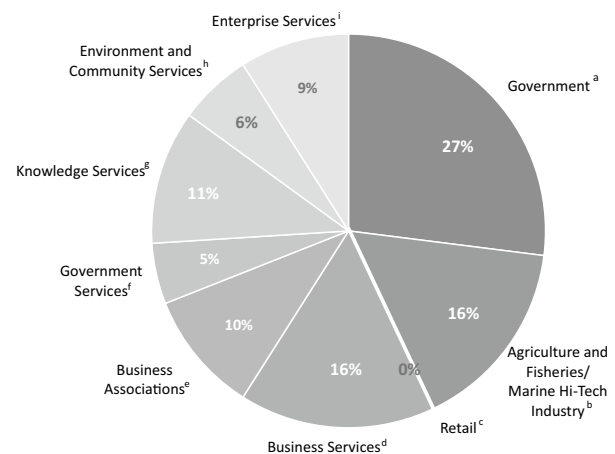


Fig. 4 Experts cited on Blue Economy in the UK by Sector, 2012–2020

Dock (articles 63, 64). However, such voices were not loud when the full cast of experts is assembled. Composition of the choir signalled that BE was legitimately in the grip of business, industry, science and government, and that BE was generally not a matter for debate by ordinary citizens. This cast of experts must have helped to shape understanding of what BE is in the minds of readers. It is predominantly about expert decision-making and discussion among business leaders, entrepreneurs, scientists and politicians. That signals BE as a closed circle of experts even if they sometimes disagree, and one lacking a similar number of experts on the environmental and social aspects of sustainability. Interestingly, although Marine Scotland was mentioned in one article (70), no experts from the MMO or Marine Scotland were quoted.

Together, the 79 articles announce over £8.316 billion of investments, 2012–2020 (Table 1). A careful reading can yield some sense of the types of projects and investors, and their relative importance. However, economic reporting was not standardized across the articles and newspapers. A good first step is therefore to separate out articles reporting regional development in the Highlands and Islands Region. This reporting forecast future investment in the region for the next decade, summing to £1.32 billion, but did not break this sum down into a list of individual projects. Potentially, this set of activity is related to both development and sustainability discourses, but it is perhaps best viewed as tied to a specific regional development discourse. By excluding this sum from our list, project investment totals £6.996 billion. One project – CES's omnibus fund for coastal regeneration, green energy and sustainable food production (£70 million) – is related to both regional development and sustainability discourses since it combines ecosystem regeneration with community and renewable energy projects. Note that three other projects – an aerospace

maintenance, repair and operations cluster in Ayrshire (£251 million), a broadband roll out (£146,000), and a Johnson and Johnson health facility (£9 million) – may indirectly contribute to blue economy but certainly square with regional development. Here are signs of the subordination of blue economy into an older agenda: developing a regional economy. If we were to exclude these projects, we would be left with a total investment of £6.736 billion in 25 separate projects clearly related to BE. Nevertheless, we will include them in the BE total (Table 1).

Investments in ten renewable energy projects amounted to £5.463 billion (80.15%) of the total blue economy project investment. The largest of these projects were CS Wind UK's (part of Korean-owned CS Wind Corporation) OWE project (£2.6 billion), energy company Scottish and Southern Energy (SSE)'s project to reinforce the electricity network in Scotland (£1.3 billion); and NorthConnect's proposal to build an electric cable linking Scotland to Norway (£1.5 billion). Subsequently approved by UK administrators but dropped by the Norwegian Government, the NorthConnect project can be read as a sign of boosterism in BE reporting.

The remaining 19 projects attracted £1.533 billion of investment. Applications for funding could be substantial. Here the largest project announced was the marine hub focusing on smart manufacturing, life sciences and low-carbon energy to be financed to the tune of £633 million by the City Deal for Swansea Bay City Region and £637 million by private companies (article 10). However, this was not reported as being financed so is not included in Table 1. The projects that were financed were far less grandiose. They included £130 million for low carbon projects organised by an LEP and Council, £45 million for an Entrepreneurial Spark accelerator to support up to 600 companies, £38 million for a decommissioning centre organized by the Oil and Gas Technology Centre and University of Aberdeen, £28 million for a marine hub organised by Pembroke Council and funded by a City Deal,

and £22 million to support an undersea technologies cluster at Aberdeen funded by Scottish Enterprise, Nippon Foundation and Aberdeen Council. Universities and research institutes were involved in several of these projects but invested little capital. EU agencies were also investors, and together reportedly invested £17.5 million in diverse projects including regional development in the Highlands and Islands Region, a tidal energy feasibility study, a marine energy test area, a marine robotics centre and a training centre for unmanned systems science. CES was a more significant investor. It purchased land for an industrial park and announced a fund for coastal regeneration, green energy and sustainable food production, together summing to £574 million.

Several aspects of this pattern of investment shaped reporting. Investment was certainly the main indicator used when valuing BE, clearly ahead of employment. Investments in OWE were far larger than in tech hubs, innovation centres, industrial parks or other infrastructure projects. However, for newspapers the enterprise entities, councillors, MPs and ministers working to mobilize the latter generated more BE announcements and events than OWE, which will have been reported as renewables without mentioning BE. Further, as media switched to reporting BE as investments it followed the geography of investment, registering as coverage based out of Glasgow, Aberdeen, Edinburgh, Cardiff, Pembroke and Plymouth. While it can be argued that these projects were oriented to either build renewable energy infrastructure, make the ocean less placeless, even enhance environmental protection and coastal community development, it remains unclear whether environmental and social criteria were used by decision-makers to assess these projects.

BE as discursive field

When experts discuss BE, they express what they think BE is. Analysis of these statements reveals two separate discourses on BE. First, a 'blue growth' discourse viewed BE as intensifying ocean resource use aided by new technology and investment and, necessarily and ethically, aimed explicitly at economic growth, perhaps with emissions reduction as an add-on. Second, a 'sustainable blue economy' discourse voiced BE as being ethical only when it required environmental protection, restoration and improvement, controls on corporate use of the oceans, and the use of environmentally friendly new technology and investment aimed at climate change goals. A specific variant of the 'sustainable blue economy' discourse took form through the Scottish Government's Blue Economy Action Plan. This envisaged BE as a Scottish national project, linked to community development, environmental protection and sustainability, and therefore extending to embrace investments in salmon farming, CCS, OWE, hi tech innovation and infrastructure. While informational reporting of events and announcements was the mainstay of

Table 1 Blue Economy Projects and Investment

Project Types	Projects (no.)	Investment	
		(£m)	(%)
Regional Development	n.a	1,320	n.a
Regeneration Fund	1.0	70	1.03
Renewable Energy	10.0	5,463	80.15
Industrial Park	1.0	504	7.39
Infrastructure	6.0	602	8.83
Decommissioning Centre	1.0	38	0.56
University Training	2	0,3	0.00
Innovation Hub	3.0	56	0.82
Enterprise Services	1.0	45	0.66
Hi-tech Projects	4.0	38	0.56
Totals	29.0	6,996	100.00

Source: Compiled from LexisNexis Dataset

UK media coverage of BE, some more investigative reporting revealed controversies swirling around these discourses. Ethical claims were made about these discourses.

Blue growth discourse

BE became increasingly associated in UK media with blue growth, industrial growth, the maritime sector and marine resource use. Speakers drawing these associations highlighted the importance of the maritime sector in economic terms, and used business terms to demonstrate how hip the technology and business practices were. For example, when reporting a meeting of delegates from 60 companies in 2013 (article 6), *Eastern Daily Press* quoted North Sea Marine Cluster's founder Gregory Darling and business coordinator Paul Hunt. They each highlighted the existing size and importance of BE in economic terms: "the UK maritime sector contributes more to the economy than the aviation and aeronautics sector"; the "Southern North Sea contributes 35% of the UK's marine economy" (article 6). These were underestimated and neglected industries. Growth opportunities were extolled. At one event organised by Subsea UK in 2020, Neil Gordon, the industry body's chief executive, was quoted:

"Globally the blue economy is forecast to be worth £140 billion by 2035 and Scottish companies who can develop disruptive technology can capitalise on this opportunity." (article 42).

According to Stephen Phillips, chief executive of CBBC, investment opportunities abounded and not just in the UK:

"A number of coastal cities in China are investing in the 'blue economy' and looking for partners; there are great opportunities." (article 9).

Initially, EU institutions fostered innovation for BE. In 2012, under the title "Europe's wind sector to spur 'blue growth'", *Utility Week* (article 2) reported the launch of an EC consultation "Marine Knowledge 2020". Aimed at stimulating innovation, reducing costs and risks and 'improving competition' in Europe's marine industries, *Utility Week* declared the initiative to be:

"A flagship project to centralise and make freely available vast quantities of data on the marine environment [that] will unlock industrial growth in Europe's 'blue economy'" [emphasis added] (article 2).

That is a declaration that the investment would render the oceans known rather than placeless, but the effect would be to facilitate blue growth.

Others saw a need to mobilize investment and new institutions. When Paul Wickes and Jonathan Williams, CEOs of, respectively, the not-for-profit membership organisations

Cornwall Marine Network and Marine South East, announced the formation of an industry organisation Blue Growth UK in 2017, they saw this as building new foundations for marine support. They aimed to take advantage of the remaining 3½ years of EU funding access, but were now building alternative opportunities by signing up 8000 businesses to Blue Growth UK (articles 14, 16). Others spotlighted efforts to leverage knowledge transfers across the blue economy. When commenting on the NSRI 'The wave and tidal transformation report' 2018, Tony Laing, NSRI's director of research and market acceleration acknowledged that, to "reduce costs in an emerging industry" they need to leverage "value of knowledge transfers across the blue economy" (article 31). He was alluding to NSRI's 'Mastermining workshop' in which NSRI partnered with ORE Catapult and Energy Technology Partnership (ETP) to research wave and tidal energy potential. Scottish Enterprise's Andy McDonald (Sector Director, Energy and Low Carbon Technologies) also at the event, was adamant: we "must maintain Scotland's world leading position in subsea engineering" 2018 (article 31).

By 2020, the arguments for blue growth linked investment, research and innovation to climate change action goals. Thus, Neil Gordon, chief executive of the industry body Subsea UK, observed:

"with the race to achieve net-zero, a green recovery on the horizon, including hydrogen and CCUS [carbon capture and undersea storage], coupled with oceans of opportunity in the *blue economy*, we are sensing renewed optimism [in the subsea sector]" (article 78, emphasis added).

While acknowledging new impulses for blue growth he nevertheless prioritised seizing the 'opportunities of BE', so growth remained the priority for him. Note that this discourse wraps BE in business ethics: competition, leveraging, taking advantage, the race to achieve, opportunity, optimism, reducing costs, emerging industry, disruptive technology. While the content could square with sustainability discourse, the ethics skewed to economic growth discourse.

Sustainable blue economy discourse

Other voices called for a "sustainable blue economy" (articles 8, 28), needing the "blue economy to turn green" (article 1), or demanding "a strong 'blue economy' for the future" (article 14). Readers were reminded that the UK Government had committed to making "shipping cleaner and greener" (article 23). Diverse voices pointed out that environmental protection (articles 20, 22, 23, 25) is needed for a blue economy. Others ventured further. The director of corporate social responsibility at Glenmorangie Co. saw opportunity for a blue economy based on 'environmental enhancement' through native oyster

reef restoration. He saw oyster harvesting backed by restoration of oyster beds as an economy worth £3.5 m a year for Scotland (article 47). Sometimes the relations between environmental protection, economic growth and BE were confused, for example when in 2013 the chief operating officer at Royal Yacht Association Scotland asserted that “growing boating is related to efforts to grow the blue economy: the better the experience, the more boaters” (article 4). But when the Prince of Wales hosted a meeting of government representatives, fishing industry, investors and conservation groups in London in 2014 to discuss “financing the transition to a sustainable blue economy” he certainly was focusing attention on both environmental protection, and unsustainable fishing practices (article 8). Later articles echoed these ideas, for example in 2020 when Fiona Houston, ‘SeaEO of Mara Seaweed’ saw seaweed as “an example of our potential to be a leading country in building a sustainable blue economy” (article 73). As we have seen, there were calls for kelp, to restore oyster beds and save native salmon from salmon farm pollution. Experts associated with these endeavours spoke about specific places rather than a vaguely known ocean. As these statements indicate, BE was a term used by experts emphasising tying BE with the ethics of environmental protection, even enhancement, to make a ‘sustainable blue economy’. This discourse comes with an ethics of sustainability (cleaner, greener, restoration, environmental enhancement, financing the transition, unsustainable practices) and justice (for the future). However, most prominent in this discourse was a specifically Scottish variant.

During 2020, Nicola Sturgeon’s Scottish Government elaborated its new Blue Economy Action Plan through a suite of announcements. In March, Sturgeon agreed on targets for net zero carbon and the climate emergency with the UK Government (article 57). In September, a report spelled out plans to align Scotland’s port facilities with offshore energy resources to realise what Cabinet Secretary for the Environment, Climate Change and Land Reform Roseanna Cunningham, called “the opportunities of our ‘blue economy’ model” (article 70). That same month, Marine Scotland reported on the jobs, production and processing in Scotland’s salmon industry, and Fergus Ewing, Scotland’s Secretary Rural Economy, commented:

“The sustainable growth of the aquaculture industry is imperative moving forward and is an important element of the blue economy model” (article 77).

In October, a 100,000 ha West of Scotland MPA was announced as “a key element of our Blue Economy Action Plan” (article 81). In December, Scotland’s Fisheries Secretary announced Scotland’s Future Fisheries Management Strategy 2020–2030 (article 104). These announcements were clear signs of SNP commitments to transition making and a ‘sustainable blue economy’.

This transition making helped to shape BE coverage. One reason for the widespread coverage of a contract to build a tidal power station for an island in Wales was that it confirmed both Scottish innovation and the Scotland Government’s sustainable blue economy agenda. *Herald Scotland* quoted Jess Hooper, Marine Energy Wales saying “it’s great to see the blue economy contributing to the green recovery for Wales’ bid to achieve net-zero” (article 87). Thus, rhetoric of ‘blue growth’ was also present as the Scottish Government elaborated its new Blue Economy Action Plan. As he delighted in the “enormous potential” for tidal energy highlighted by a report, Paul Wheelhouse, the Scottish Government’s Energy Minister, suggested that BE could be a matter of comparative advantage predestined by nature: “Scotland the natural home for marine energy development” (article 31). This economic growth would be ‘natural’, sustainable and environment saving. This discourse featured an ethics of strategic planning in the climate emergency (transition making, green recovery, agreed targets, aligning infrastructure planning to OWE), alongside ethics of marine protection, doing the economy naturally, sustainable growth, fisheries management and innovation.

Ethical controversy

Various voices questioned the economic governance of BE but from different standpoints. In an extended commentary on BE titled “The ‘blue economy’ is more than fish and chips” published in 2018, *The Sunday Telegraph* reported the start of a “government consultation on reclaiming Britain’s maritime leadership” (article 23). Chris Grayling, UK Transport secretary, opened the event and Hugh McNeal, chief executive Renewable UK, led the Maritime 2050 panel. *The Sunday Telegraph* framing was that as:

“ministers mull billions in support for industries via major “sector deals”...”, they were now “consulting with ... seafaring industries to view the blue economy as a whole”

It saw BE as a ‘response to crisis’. It cited Michael Creed, Ireland’s Agriculture and Marine Minister, as arguing that harnessing Ireland’s blue economy was “born out of necessity” during crisis years in the country’s economy (article 23). Highlighting the economic illusions at work, the article was sceptical: “Britain’s maritime heritage is quietly being reimagined as the blue economy”; and that “chimes with a post-Brexit economic utopia” (article 23).

Business interests expressed unhappiness with aspects of the new City Deal governance. For instance, in 2019, *The Western Mail* reported Welsh companies ‘desperate’ for their planned Swansea Bay City Deal to be signed with one managing director experiencing “a lot of frustration with the time being taken to get the city deal done” (article 36). *The Western Telegraph* reported a similar situation

when the business case for Pembroke Dock Marine was approved by the UK and Welsh Governments in July 2020, but still had not secured City Deal support (article 64).

Governance issues with wind energy development also surfaced. Curiously, while reporting that Donald Trump's litigation to stop OWE development next to his golf course had failed "to slow the progress of wind power" in 2018, *Scottish Business Insider* went on to investigate what was (article 29). One expert challenged the practice of forcing firms to bid for financial support in auctions of OWE sites as a "selective targeting of support" producing winners and losers (article 29). Another acknowledged that Scotland's move to a zero subsidy regime for onshore wind projects may have slowed investment but this was no longer the case (article 29). Energy consultants expected the cost of new onshore wind projects to drop beneath the UK Government's predicted wholesale electricity price, delivering a net benefit to UK electricity consumers. A further expert contended that projects had been re-planned to use larger turbines so that the governance had produced efficiency gains (article 29). In this exchange, the assessment of economic governance for BE seemed to be that there were issues to address but the results would be worthwhile.

That was certainly not the verdict of former SNP MP, then director of Momentous Change Ltd., Roger Mullin. He deemed a decision in 2020 by SSE to award fabrication of 114 wind turbines for an OWE array not to Scottish firms but to firms in China and the UAE, a "severe blow to local economies" (article 74). SSE must face up to its corporate responsibility: "Scotland is missing out on the downstream activity from major developments off shore" (article 74). Mullin positioned himself as an economic nationalist and sustainable blue economy proponent, but declared the SNP was not delivering effective national economic policy:

"The Scottish Government needs a more ambitious strategy for the 'blue economy'. We need a stronger focus on the sustainable use of ocean resources involving a wide range of offshore and some on-shore activities, including downstream activities. Jobs, investment, climate change and sustainability issues are critically involved. Operations such as those in Fife should have a key role in such a national strategy. We don't need to wait for independence to be more ambitious for Scotland." (article 74).

Each of these articles raised issues of fairness, bureaucratic efficiency, effectiveness, plausibility and regional development in the governance of BE projects and did so using terms from business management and economics. By reporting in this way, UK media acknowledged that proper economic governance of BE was expected but contentious.

Environmental experts demanded effective environmental protection. In a 2013 opinion piece, the founders of Blue Marine Foundation demanded that the "British government ... appoint an ocean champion" (article 3). In 2017,

the director of living seas at Wildlife Trust argued for "a new marine management system based on Regional Sea Plans" with "a network of protected areas" at its core so as to "achieve global goals for sustainable development" (article 14). When the UK's Environmental Audit Committee announced its intent to audit the UK's sustainable seas in 2018 (article 27), it declared the UN's Global Goals for Sustainable Development and Aichi biodiversity targets as its goals. These articles mention BE but did so to announce that further checks on BE were needed because environmental protection must be prioritized. In effect, environmental experts declared that MSP was not up to task on environmental protection, therefore neither was BE. Note that neither MMO nor Marine Scotland staff featured in coverage of BE.

UK media also made clear that environmental governance in Scotland's Blue Economy Action Plan was controversial, namely the plan's commitments to both environmental protection and to salmon farming. Reactions to Minister Mairi Gougeon's new MPAs were hostile: 'Don't go far enough' was *Herald Scotland's* headline (article 99). The head of marine policy at Royal Society for the Protection of Birds Scotland, Alex Kinninmonth, 'welcomed the new MPAs' but, 'in the climate emergency' he urgently needed an MPA around Orkney. The National Trust for Scotland's head of conservation and policy, Stuart Brooks, pleaded for "adequate enforcement plus strong management plan and adequate investment" so that the MPAs would be effective. Both were termed 'campaigners' in the article. In a related article (100) Gougeon received support from NatureScot's Interim Director of Nature and Climate Change, Eileen Stuart. Here the lines were firmly drawn.

The Scottish Salmon Producers Organisation's (SSPO) chief executive clearly linked growers' aspirations to blue economy as economic growth using ocean resources but protecting the environment (article 80). SSPO announcements – a new charter for sustainable production (article 84), to build "sustainable housing" for workers (article 85), new anchoring technology for farms (article 97) – aimed to demonstrate its commitment to the Action Plan. These efforts notwithstanding, critics rounded on salmon farm expansion plans. Scottish Wildlife Trust opposed plans for a 12-cage salmon farm in the Wester Ross MPA, while Salmon and Trout Conservation Scotland reported a growing sea lice parasite problem on salmon farms in Argyll and Bute, Skye and Outer Hebrides, and local salmon farmers "devastated" by an algal bloom and rising levels of sea lice (article 84). An investigative report by Sarah Sands published by *Scottish Mail on Sunday* and *MailOnline* (articles 79, 80) assembled evidence that the industry had not cleaned up its act. With salmon farming, making the sustainable blue economy, environmental protection did not go far enough: degrowth is needed.

CES also aligned itself to the SNP's Blue Economy Action Plan. When CES purchased land for renewable energy

production, the move was commended by Roseanna Cunningham, the Scottish Government's Cabinet Secretary for the Environment, Climate Change and Land Reform: the move showed commitment "to ending Scotland's contribution to climate change and securing a sustainable future" (article 65). But when CES announced a new communities fund for coastal regeneration, green energy and sustainable food production, the Director of Friends of the Earth Scotland questioned the Estate's plans to invest in both fish farming and carbon offset and storage (articles 59, 60, 67). CES's Director of Strategic Engagement countered: "salmon farming is vital for rural and national economies" (article 59). Separately, the Crown Estate endorsed CCS when commenting on a new app to identify every North Sea energy site, thus ending ocean placelessness (article 83). Again, the adequacy of environmental governance related to BE planning was at issue.

Thus, during 2020, UK media evidenced tensions between the Scottish Government's notion of building a sustainable blue economy and those working towards either environmental protection or national economic development and independence. Further, in reports focused on events outside Scotland, controversy also circled around the effects of neoliberal governance practices and the need for better environmental protection. Articles on these controversies revealed some investigative reporting, and included solicited interviews rather than reports of events and announcements. It revealed BE to be two discourses – 'blue growth' and 'sustainable blue economy' – neither of which was immune from contestation. The contestation focused on governance ethics by contesting what constituted appropriate environmental and economic governance. Local residents and fishers seldom featured in these contestations.

Conclusion

This paper elaborates on Germond-Duret and Germond's (2022) conclusion that when reporting BE, UK media published a dominant development discourse concerning the UK's marine space, with little attention to the risks of growth agendas. The analysis reported in this paper reveals that there was no sustained coverage of BE, little that communicated with a national audience, little investigative reporting, and that London-based newspapers did not dominate news production on this topic. Rather UK newspapers began a surge of reporting on BE projects in 2020. The UK's fragmented newspaper landscape appears to be an important factor contributing to these patterns. Local newspapers lacked the news production capacity to engage systematically with BE. Generally, reporting was dominated by coverage of announcements and events. Some reporting ascribed roles to the Scottish Parliament and Marine Scotland, even to regional institutions in England and Wales, even for Westminster. There was very little investigative reporting and little attempt to use any criteria besides economic performance

to assess BE investments. Thus, this paper expresses concern about the capacity and willingness of UK newspapers to engage with BE making.

Media attention reported two sets of activity. First, it reported a new flow of investments into local growth plans that coincided with the completion of the transformation of regional development institutions in England. Some LEPs bid for funding of BE projects and local and regional newspapers registered this buzz of entrepreneurial activity. Regional newspapers in Aberdeen, Glasgow, Edinburgh, Southwest England and South Wales began to report BE as economic opportunities. They highlighted investments, jobs, regional economic growth, technology and innovation as journalists reported local events and announcements. Even so, the actual sums of investment involved were nowhere near as large as those reported in OWE at the time. Journalists collected statements from institutional experts, especially from business, business management, economics and engineering. These experts used business ethics to express the legitimacy of exploiting investment opportunities, thus revealing their agenda as 'blue growth' even though they called their activities 'blue economy'. A few experts expressed dissatisfaction with the time consuming practice of bidding for funding, but the ensemble effect signalled that BE was in the grip of business, industry and science. 'Knowing the environment' for resource use was a stated aim for investment but environmental protection was left to others. This amounted to a 'blue growth' discourse referring to industrial growth, the maritime sector and marine resource use even when some projects contributed to meeting sustainable development goals.

Second, other institutions announced plans to build what they each called a 'sustainable blue economy'. These included CES and the Prince of Wales, the Highland Council, Highlands and Islands Enterprise, Visit Scotland and the Scottish Salmon Producers Association. The Scottish Government was a prominent user of 'sustainable blue economy' since this badged the SNP's new economic plan. When journalists covered the announcements of these institutions, the experts they interviewed tended to be politicians, ministers, councillors and directors of public sector agencies. They spoke using the ethics of regional development, achieving net zero and protecting, enhancing or restoring ocean environments. Some spoke of making 'green and blue economy futures' and protecting the environment. Others – including speakers for salmon, oyster and seaweed producers – aligned their own projects with the Scottish Government's 'Blue Economy Action Plan'. Thus, 'sustainable blue economy' became a term used by experts referring to diverse activities ranging from investments in CCS or salmon farming through tech hub developments, infrastructure investments and Visit Scotland promotional events to more sustainable projects such as OWE. Journalists also reported critical views on these plans: basically, inadequate attention to environmental protection, or inappropriate governance of blue growth investments

that frustrated regional development. Indeed, reporting revealed views that both CCS and salmon farming were unsustainable.

This paper confirms Germond-Duret and Germond's (2022) finding that UK newspapers framed BE in terms of economic opportunities and weak sustainability and offered limited critique. However, BE discourse on UK marine space is a decidedly recent phenomenon in UK media. Media coverage of BE is shaped by both the recent restructuring of regional development institutions in England and their persistence in Scotland through devolution. Further, the discourses identified here do

not readily correspond to the discourses of placelessness, development or sustainability. In each case, institutional actors behind the activities reported used 'blue economy' for their own purposes. Analysis reveals that UK media reported such a confusion of projects under 'blue economy' that it must be hard for readers to take this term seriously as a coherent ethical agenda. Indeed, expert statements on 'blue economy' reveal a discursive field in which multiple ethical claims are made and contested around competing 'blue growth' and 'sustainable blue economy' discourses.

Appendix 1. Blue Economy in UK Media Database

No	Title	Newspaper	Date
1	Marine scientists gather for conference	The Plymouth Herald	12.09.2012
2	Wind sector to spur 'blue growth'	Utility Week	19.10.2012
3	Let Britain lead in saving our seas	The times.uk	26.02.2013
4	Sailing Chance for the voice of Sleeping Giant to be heard	The Herald (Glasgow)	13.03.2013
5	Centre introduces alien-spotting guide	Aberdeen Press & Journal	20.07.2013
6	Importance of marine economy highlighted	Eastern Daily Press	23.10.2013
7	How marine economy can be our future	Eastern Daily Press	11.11.2013
8	Prince Charles makes keynote speech on sustainable economy	Future News	09.07.2014
9	The world's your oyster	The Plymouth Herald	19.11.2014
10	Minister opens ocean robot centre	Daily Echo (Newsquest)	24.11.2015
11	NSC's two-day meeting	Aberdeen Press & Journal	11.01.2016
12	25 years of the world-renowned Orkney Campus	Aberdeen Press & Journal	07.03.2016
13	A region continuing to weather economic storms	Scottish Business Insider	06.09.2016
14	Blue growth UK—building new foundations for marine support	Falmouth Packet	25.08.2017
15	£4.5 m invested to help develop North Wales' tidal energy sector	Western Mail	02.09.2017
16	Marine industry groups join forces in search for prosperity	The Plymouth Herald	13.09.2017
17	£4.5 m Boost for Island Tidal Project	Daily Post	27.09.2017
18	Boosting marine industry	The Plymouth Herald	27.09.2017
19	Prince Charles: Anyone eating seafood will be consuming plastic too	thetimes.co.uk	05.10.2017
20	Plastic is on the menu, warns Charles	The Times (London)	06.10.2017
21	Unique moment to save our Cornish seas	Falmouth Packet	25.10.2017
22	Prince's plea to save seas from plastic	The Daily Telegraph	01.03.2018
23	The 'blue economy' is more than fish and chips	The Sunday Telegraph	15.04.2018
24	We need to work together to deliver inclusive, innovation-led growth	Scotsman	19.04.2018
25	Inquiry into building 'blue' economy	The Herald (Glasgow)	23.04.2018
26	Sustainable Seas inquiry to examine global fishing impact	The Grocer	28.04.2018
27	Sustainable Seas Select committee inquiry deadline	Future News	04.05.2018
28	MPs quiz Chief Scientific Advisers on sustainable seas	Future News	04.09.2018
29	Trump's hot air fails to slow the progress of wind power	Scottish Business Insider	07.09.2018
30	Ocean Symposium and exhibition at St Mary in the Castle, Hastings	Bexhill Observer	18.09.2018
31	Potential of UK's tidal industry revealed in new report	The National (Scotland)	25.09.2018
32	Subsea sector hoping for vital wave and tidal role	Aberdeen Press & Journal	25.09.2018
33	Atlantis lands European grant for MeyGen tidal power innovation	Scotsman	05.12.2018
34	Column: 'Business is lifeblood of our area'	Somerset County Gazette	15.12.2018

No	Title	Newspaper	Date
35	City moves: Who's switching jobs?	City A M	18.12.2018
36	The Welsh companies desperate for Swansea Bay city deal to deliver	The Western Mail	24.06.2019
37	Forging ahead for jobs to make the physical digital	The Western Mail	10.07.2019
38	Aberdeen area can lead the way on technologies to save the planet	Herald (Glasgow)	03.09.2019
39	Aberdeen putting itself at forefront of new energy age	Herald Scotland	03.09.2019
40	Scotland-Japan partnership secures £9 m for underwater technology	thetimes.co.uk	09.10.2019
41	Generating electricity from a WW2 barge	Milford Mercury	09.10.2019
42	Underwater tech projects secure 21 m in funding	Scotsman	09.10.2019
43	The Bottom Line: Electric greens, and the blue economy	Herald Scotland	10.10.2019
44	Projects of significant value to Scottish companies in growing field	Aberdeen Press & Journal	10.10.2019
45	no headline	Aberdeen Press & Journal	10.10.2019
46	Partnership secures 9 m for underwater technology	The Times (London)	10.10.2019
47	Native oysters could be worth 3.5 m	Herald Scotland	08.11.2019
48	Pearl of an idea: How native oysters could be worth £3.5 m	The Herald (Glasgow)	08.11.2019
49	no headline	Sunday Herald (Glasgow)	29.12.2019
50	Water babies. Why our coasts and waters make us who we are	Herald Scotland	29.12.2019
51	Great South West partners target 45 billion economic boost	Bournemouth Echo	13.01.2020
52	Moves to create 'Great South West' with 190,000 more jobs	Bournemouth Echo	17.01.2020
53	A cry for kelp. Why Scotland's green future could be blue	Herald Scotland	19.01.2020
54	Free ports can revitalise the UK's coastal communities	City A.M	12.02.2020
55	Aiming high to secure jobs and investment on the ground	Scottish Business Insider	28.02.2020
56	Key step in carbon capture	Aberdeen Press & Journal	16.03.2020
57	Transition revamp	Aberdeen Press & Journal	16.03.2020
58	£70 million blueprint will breathe new life into coastal communities	The Herald (Glasgow)	08.04.2020
59	Coastal life set to be transformed under £70 m plan	Herald Scotland	08.04.2020
60	Crown Estate Scotland's £70b plan for 2020–2023	Scottish Business Insider	08.04.2020
61	Mara Seaweed looks to recapture the wave of momentum	Herald Scotland	16.04.2020
62	Boats bring buoyancy to town centre	Aberdeen Press & Journal	20.04.2020
63	Jobs on cards as marine energy project approved	The Western Mail	12.06.2020
64	60 m Pembrokeshire marine energy project gets green light	Western Telegraph	15.06.2010
65	Plans for 500 m Scottish renewables hub unveiled	Herald Scotland	29.06.2020
66	How Cornwall's green recovery could help UK	The Western Mail	03.07.2020
67	Broader strategic thrust	Aberdeen Press & Journal	06.07.2020
68	Cornwall's 'green' revolutions could help whole of UK	Cornish Guardian	08.07.2020
69	Chancellor is urged to back the Great South West	The Western Mail	10.07.2020
70	Report maps out route for ports to harness wind	The Press and Journal	03.09.2020
71	Protecting oceans must be priority	The Press and Journal	06.08.2020
72	Loch Long site near Arrochar set for 'first-of-its-kind' salmon farms	Helensburgh Advertiser	10.09.2020
73	Agenda: Why Scotland must support its blue economy	Herald Scotland	12.09.2020
74	Wind turbine jobs row: we must act more like we aspire to be	The National (Scotland)	23.09.2020
75	Subsea tech commercialisation tool to speed N Sea energy transition	Herald Scotland	23.09.2020
76	Report reveals value of salmon	Aberdeen Press & Journal	24.09.2020
77	Fish farm industry 'could be worth £885 m'	Herald Glasgow	24.09.2020
78	Underwater engineering opportunities explored	The Press and Journal	28.09.2020
79	Nicola Sturgeon's bid to use salmon as the 'new oil'	MailOnline	04.10.2020
80	Why Nicola Sturgeon's bid to use salmon as the 'new oil' fuelling independence for Scotland could end in disaster	Scottish Mail on Sunday	04.10.2020
81	The new MPA is to protect the marine habitat	Stornoway Gazette	18.10.2020
82	Hanvey calls for more marine jobs to be created in Fife	Central Fife Times	21.10.2020
83	Interactive OGA map app highlights every North Sea energy site	Aberdeen Press & Journal	28.10.2020
84	Salmon farmers pledge to reduce environmental impact	Herald Scotland	10.11.2020

No	Title	Newspaper	Date
85	Highland homes to lure workers to raise salmon	The Times (London)	10.11.2020
86	Vision for future of salmon fishing	The Press and Journal	11.11.2020
87	Tide power world first; 'Island in the current' switches to blue energy	Daily Post (North Wales)	13.11.2020
88	Scottish firm secures 1.2 m to help create 'blue energy island'	Herald Scotland	13.11.2020
89	Scottish firm wins Welsh contract to create 'blue energy island'	The National (Scotland)	15.11.2020
90	Scottish salmon is the best in the world, let's keep it that way	The Herald (Glasgow)	17.11.2020
91	An energy world first for Bardsey	The Western Mail	17.11.2020
92	Blue Planning: Remote island to be powered by wave energy	Daily Mirror	17.11.2020
93	Remote North Welsh island is home to just FOUR PEOPLE all year	MailOnline	17.11.2020
94	North Wales island first in world to be powered entirely by waves	dailypost.co.uk	17.11.2020
95	no headline	Sunday Herald (Glasgow)	19.11.2020
96	Scottish salmon farms see no catch in aiming for large scale growth	Herald Scotland	26.11.2020
97	New anchoring tech cuts impact on environment	Herald Scotland	26.11.2020
98	Government announces £1 m for underwater engineering hub	The Press and Journal	26.11.2020
99	New marine protected areas don't go far enough	Herald Scotland	03.12.2020
100	New sites to safeguard Scotland's iconic marine species	The Scottish Farmer	03.12.2020
101	Investment worth a total of £49 m for Stornoway Port	Stornoway Gazette	09.12.2020
102	Bringing key parties together over their common goals	Hull Daily Mail	09.12.2020
103	Stornoway deep water port to create 200 jobs as part of masterplan	The Press and Journal	10.12.2020
104	New strategy announced to promote sustainability in fishing	Buchan Observer	17.12.2020

Source: LexisNexis Database. Search for 'Blue Economy' and 'Blue Growth'

All duplicates and all articles produced by news agency services or professional journals are included

Some titles are contracted to facilitate formatting

The assigned article number is used when referring to articles in the text of this paper

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