

# Embedding the Environment in the Local Development Plan Process through SEA

A think piece

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## Summary of the argument

In this think piece we offer our reflections on what steps might be taken to help embed environmental issues into the planning process, so that they are given due weight, careful attention and suitably influence plan formulation. We focus specifically on the role of Strategic Environmental Assessment (SEA) in relation to the making of local development plans.

Our think piece is focused on Scotland and our argument is cognisant of the reforms to the Scottish planning system triggered by the Planning (Scotland) Act 2019 (hereafter 'the 2019 Act'). Consistent with the remit of a think piece, we have considered it appropriate to be thought-provoking, speculative and to draw on our own personal experience. To bolster and test our arguments we have made extensive use of the wider research literature on SEA, material emerging from the 2019 Act planning reforms, and interview discussions with experts in planning, environment and SEA, from Scotland and beyond.

It is our overall view that efforts to embed (or 'integrate') the environment into the planning system, including local development plans, must be multi-faceted and cannot rely on incremental tweaks to SEA processes alone. Instead, proponents of environmental integration need to grasp the dynamics of leverage and power in plan-making; to look to why developmental and economic goals retain their pre-eminence, and to extrapolate relevant lessons for SEA and plan-making.

Consistent with this, we organise our ideas into four sets:

- Pursuing a 'strong' conception of integration, to shift the environmental governance context for planning
- Front-loading assessment to the pre- or early plan, embracing the 'call for sites' process
- Supporting the process of environmental embedding by better liaison and better data
- Strengthened monitoring for more effective learning.

### Pursuing a 'strong' conception of integration

To drive forward environmental 'embedding' it is necessary to engage with the diverse and fluid meanings of 'integration' and assert the case for viewing environmental integration in 'strong terms' i.e. that aspects of the environment warrant being given 'principled priority' in decision-making, as opposed to being 'had regard to' or 'weighed in the balance'.

As a concomitant, embedding the environment into the planning system requires measures that take environmental goals, standards and objectives, and institutionalise them as things that the planning system is responsible for helping to *deliver* rather than just factors to consider. This, in turn, positions SEA from an

external check to becoming a vital tool for assisting local planning authorities in formulating plans that comply with these environmental standards and which sufficiently deliver on environmental goals.

To take this forward, we suggest applying effort to the following:

To think through how the system of carbon budgets and targets that form part of climate change legislation might embrace planning, in particular by considering how land- and nature-based solutions might be brought within this system.

To consider how to give a spatial tangibility to the land requirements for nature recovery and the delivery of ecological services, such that their land demands form part of the strategic process of plan-making, alongside the land demand of housing and development goals.

Finding environmental goals that work for planning will have its challenges, but it is central to environmental integration. A key driver is the introduction of ten-year plan periods as part of the 2019 Act reforms, which adds to the importance of ensuring that plans adequately contribute to wider and longer-term environmental objectives.

#### Front-loading assessment to the pre- or early plan

While it is universally acknowledged that SEA is most effective in embedding environmental concerns into plan-making if it is integrated at an early stage of the planning process, reforms to the Scottish planning system driven by the 2019 Act - notably the removal of the 'Major Issues Report' stage - have created some uncertainty as to how this might be done.

There are two pathways for ensuring that SEA is applied early on in planning. One is to apply SEA in a tiered framework, often characterised by government levels, such that SEA of the 'higher level' strategy sets the context and direction for what follows. In the Scottish planning context, careful SEA of the NDF4 would be a key instance of this approach. The second pathway applies to specific planning exercises, and entails undertaking SEA and scoping before plan-making fully begins, thus informing the process from the start.

One of the challenges of making effective, systematic use of SEA in plan-making from an early stage is that in Scotland a key component of plan-formulation – the 'call for sites' exercise – can prove difficult to incorporate. We argue that the best solution is to make sure that a spatial framework for the plan is created first, shaped by applying SEA, and therefore sets the framework for any subsequent call for sites.

## Supporting the process of environmental embedding by better liaison and better data

One factor that can undermine effective integration is discontinuities in staffing and problems in resourcing, which can undermine capacity, focus and momentum.

To address this, we propose that current efforts by the Scottish Consultation Authorities (CAs) to foster the integration of SEA and plan preparation is strengthened by the establishment of 'SEA Advisory and Evaluation Teams'. For each new local development plan, there would be an assigned team – made up by an appointed individual from each CA – that would remain in place for the period of plan preparation. The result would be coordinated advice to the planning authority drafting their LDP, and to the Reporters undertaking checks and examination of successive stages of the new plan. We further suggest that this coordination is mirrored within each planning authority, to integrate plan-preparation with the work of other expert teams through the SEA process.

Given the importance of front-loaded assessment to embedding the environment into plan-formulation – and the 2019 Act requirements for early examination of the evidence base of new plans – we recommend that State of the Environment reporting be undertaken by all Scottish local planning authorities, in advance of initiating any new local development plan. Greater emphasis on delivering environmental goals in plan-making and SEA could facilitate a more focused and consistent structure for State of the Environment reporting and, in turn, assist with monitoring.

## Strengthened monitoring for more effective learning

As well as calling for strengthened monitoring of the environmental effects of plans to improve the planning system, the monitoring of plans should be repositioned as a vital learning process within Scotland's environmental governance machinery as a whole. Lessons from the environmental performance of the planning system should be widely shared across government, to inform policy development that would improve the delivery of environmental outcomes and meeting standards. Monitoring would also help to improve the accountability for and efficacy of mitigation measures.

## 1. Introduction

The town and country planning system can lay claim to being the UK's oldest system of environmental protection (RCEP, 2002), born out of concern for the environmental conditions and associated health impacts of the Victorian city and the loss of rural space to urbanisation. Events of the past few decades have augmented that role, charging the planning system with a plethora of environmental objectives in relation to global ecological challenges, sustainable resource provision, and environmental quality, with reinforced linkages through to human health and wellbeing.

Although the environmental remit of planning has undoubtedly expanded, there remains significant debate about whether the system's environmental performance is adequate. Round after round of conceptual innovation – from planning for sustainable development, through to Green Infrastructure and ecosystem services (not forgetting excursions to natural capital, environmental capacity, ecological footprinting, biodiversity net gain and climate proofing) have injected new thinking on how the environment should be conceived in planning, without necessarily shifting the needle on one of the most fundamental questions: what priority should be given to the environment, in plan-making, vis-a-vis other objectives?

This question has become pressing, for a range of reasons. On one side, the period since the financial crash of 2008 has seen planning in the UK come under increased pressure to facilitate private sector development, with attendant emphasis on streamlining, 'simplification' and certainty (for developers) – most visible in England, but not absent from Scotland (Inch, 2018). On the other side, concern is mounting from scientific communities and civil society on environmental tipping points, and the need to act urgently to avert climate and nature emergencies. Brexit adds to the pressure. Exiting the European Union leaves environmental policy increasingly dependent on domestic action, and so brings the environmental performance of our national planning systems more firmly into view.

In this think piece we offer reflections on what we believe is required to address the challenge of embedding environmental issues into the heart of plan-making, so that they are given careful attention, due weight, and suitably influence plan formulation. We focus specifically on the making of local development plans and the role of Strategic Environmental Assessment (SEA). Globally, SEA is now formally required in over 60 countries (IAEA, 2019) and is widely conceived as a tool for integrating environmental considerations into the making of policies, programmes and plans at an early stage, prior to adoption. Yet SEA, much like our planning systems, has often failed to match expectations as a device for greening strategic decision-making, contributing most often to the minor tweaking of policies and identification of mitigation measures, rather than driving strategic choices that would serve to maintain and enhance environmental quality (Owens and Cowell, 2010).

The solution to improving the effectiveness of SEA, we argue, has to be multi-faceted, and cannot just rely on incremental adjustments to ‘add on’ processes or SEA concepts. Instead, proponents of environmental integration need ideas that better grasp the dynamics of leverage and power in plan-making. We need to look at why developmental and economic goals retain their pre-eminence, whilst environmental objectives can get marginalised, and extrapolate relevant lessons for SEA and plan-making. This requires that SEA must be linked to the wider environmental governance context, and cultivate a ‘machinery of continued vigilance’, to keep environmental concerns in focus. Embedding the environment into the making of local plans is not a one-off task.

Our think piece focuses on Scotland. Scotland’s devolved governments have attracted plaudits for their careful and comprehensive approach to SEA. However, the Planning (Scotland) Act 2019 (hereafter ‘the 2019 Act’) has triggered significant reforms to the planning system, recasting the context in which SEA is to operate. As our subsequent reflections make clear, the reforms offer both opportunities and challenges for creating an effective role for SEA.

The structure of our think piece is as follows. In the next section we set the context for our reflections first by unpacking interpretations of ‘embedding’ and ‘integration’, because how these concepts are interpreted vis-a-vis the environment is consequential for what ultimately happens in planning. The second part of our context-setting outlines the approach to SEA in Scotland, and the planning reforms initiated by the 2019 Act. Following this we outline our thoughts on what could be done to make SEA more effective. We start by explaining the central role of systems of environmental goals, targets and standards as things that planning should be structured to help *deliver*, not simply contextual mood music or factors ‘to consider’. From here, we then discuss the ways in which SEA could be reformulated in order to help keep the delivery of environmental objectives in focus, embracing: conceptions of the pre- or early plan phases; the environmental knowledge base for SEA and planning (state of the environment reports, new digital platforms); and potential procedural checks and balances for maintaining the quality and focus of SEA processes and plan modifications; monitoring and feedback.

We have taken it as consistent with the remit of a think piece that we should be thought-provoking, unafraid to speculate and to draw on our own personal opinions. Our thoughts are based on many years’ experience as researchers examining SEA, and other assessment techniques, and the relationship between planning and sustainability (see author biographies). We have supported our thinking by conducting further reviews of the academic literature on SEA, and documentation surrounding the 2019 Act reforms to Scottish planning. We have also discussed these issues with experts engaged in Scottish SEA and the 2019 Act reforms as well as SEA experts from the UK and internationally. These discussions have been immensely helpful in deepening our understanding of what is happening in Scotland,



alerting us to pertinent examples of SEA ‘good practice’ in other countries, and for testing our ideas about how environmental embedding might be better achieved.

## 2. Setting the context

### 2.1 *Interpreting ‘embedding’ and ‘integration’*

The overarching problem is the challenge of integrating environmental concerns into the heart of plan-making, so that they are given careful attention, due weight, and have appropriate effects on the content and direction of a plan. This is an enduring aspiration, readily apparent in policy, and plan-making in most countries. However, if aspirations for ‘better integration’ are intuitive and commonplace, they are far from simple, and achieving them has almost always been elusive (Jordan and Lenschow, 2010).

To address the integration problem, it is necessary to explain what we mean by ‘embedding’ or ‘integration’ when we talk about ‘embedding the environment’ in the LDP process, or ‘better integration’. This is no idle definitional musing – it has significant implications for the plan-making and assessment processes that emerge, for material outcomes, and where one looks for solutions.

As previous analyses of ‘environmental policy integration’ have explained, terms like integration and embedding can be subject to diverse interpretations (Downs et al, 1991; Fischer et al, 2013), depending on who is being asked to accommodate what, from whom, and with what level of commitment. Researchers draw a major distinction between on the one hand conceiving ‘integration’ of the environment as entailing a process in which decision-makers must ‘have regard to’ the possible environmental effects of their actions, through weighing it in some balancing process; and on the other, treating the environment as imposing a set of standards or requirements to which the actions of government and other bodies should be aligned. The latter entails giving the environment ‘principled priority’ (Lafferty and Hovden, 2003, p.9) in decision-making, as the context within which the pursuit of social and economic objectives must fit, and this has been seen as a ‘stronger’ conception of integration. ‘Weaker’ forms of integration, in contrast, see the environment as a set of factors to consider, but with no privileged claim on priorities and no commitment to particular outcomes.

A key point, then, is that the pursuit of environmental integration or embedding is an unavoidably value-laden exercise, since its interpretation reflects the value placed on environmental concerns vis-a-vis social or economic objectives. We would argue that it is these stronger interpretations of ‘integration’ that are more appropriate to times of environmental crises. They are already present in aspects of environmental policy (e.g. net zero commitments). Stronger interpretations of integration also more fully



respond to the idea of *embedding* the environment in plan-making, as articulated in our brief.

There is a clear read across between how one conceptualises integration and the broad types of mechanisms by which it is advanced. Pieter Degeling (1995) has produced a penetrating analysis of the mechanisms required to achieve effective integration and, in particular, to deliver significant re-orientation of organisational and sectoral objectives. Degeling (1995) observes that many tools and processes designed to promote integration make little long-term impact (as also observed by Jordan and Lenschow, 2010). This, he argues, is because many efforts to promote integration focus on creating new add-on procedures that invite sectoral actors to cooperate and coordinate with each other, yet leave the core objectives of sectors substantially unchallenged. Such processes often have ‘soft’, voluntaristic and negotiable qualities, and so tend to be marginal to the main, day-to-day business of sectors. They do not dislodge what sectors regard as relevant knowledge, and they do little to deflect their pre-determined courses of action (Fischer et al, 2013). For Degeling, meaningful integration must entail challenges to the core goals of sectors, requiring that issues, knowledge and objectives previously outside their normal sphere of operation become instead a core problem in ways that are much less negotiable.

How is this general discussion germane to planning and SEA? Very much so, in a number of ways.

Firstly, for all that being ‘integrative’, ‘comprehensive’ and ‘multi-dimensional’ are central to the self-image of planning (Gower-Davies, 1972; Fischer et al, 2013), the planning system can still be understood as a sector, and a sector in which certain objectives are dominant, and are institutionalised in various elements of procedural machinery – processes, checks, data – to ensure that they are delivered. Housing is a long-standing example, but the last fifteen years have seen infrastructure, too, rising to become a pre-eminent objective for planning with successive revisions to the Scottish planning system designed to smooth its delivery. The environment, by comparison, is often positioned as a factor to consider in delivering those goals, sometimes even a ‘barrier’, rather than a set of goals which planning is charged with delivering.

These issues apply equally to SEA. Although presented as a tool for environmental integration, SEA theorists and practitioners have faced their own struggles over what integration should mean (Bina, 2008; Tajima and Fischer, 2013; Fischer et al, 2013). This is reflected in debates about its very purpose: is SEA primarily about helping to ensure that policies, programmes and plans contribute to the delivery of environmental sustainability, or about demonstrating bureaucratic transparency and rationality, or mere regulatory compliance (Therivel and González, 2019)? Contrasting conceptions of integration also feature in tensions about the appropriate

use of SEA: whether it is utilised as a central component of plan formulation for delivering more sustainable policy-making, or just as an external check (or a ‘hurdle’ to overcome: McLauchlan and João, 2011b)? Indeed, SEA can itself slip into becoming a sector of activity on its own, separate from plan-making.

However, whilst SEA is legislated as an assessment procedure applied to one specific policy, plan and programme only (based on the European SEA Directive [CEC 2001]), various authors, organisations and agencies have suggested that it can only be fully effective if approached from a framework perspective. In this context, assessment objectives, targets and tasks (e.g. the consideration of specific alternatives) are connected with a particular decision tier and/or administrative level (WHO, 2020; IAEA, 2018; Bundesministerium für Verkehr, 2018; EC, 2005; Fischer, 2002b). An important role of SEA is to support the systematic consideration of tier/level-specific actions and, in this context, to establish whether any important objectives, targets and tasks are left unaddressed in the overall decision framework. Finally, and in line with our suggestions for future SEA practice, Morrison-Saunders and Fischer (2006) suggested that a key condition for an effective consideration of environmental aspects through SEA was the existence of clear trade-off rules. In particular, these need to include agreement of non-negotiable environmental goals and targets.

For environmental concerns to be meaningfully embedded into the planning system it is therefore necessary that the wider policy and governance framework institutionalises environmental goals, standards and targets, not simply as factors to be considered, but as non-negotiable key elements that planning needs to help to deliver. This in turn repositions SEA as a tool with a substantive focus, for assisting local planning authorities in formulating plans that comply with these environmental standards and which sufficiently deliver environmental protection, mitigation and enhancement to meet environmental goals.

It is important to acknowledge that just because objectives and targets are defined, this does not mean that they are ‘automatically’ effectively implemented (Jordan and Lenschow, 2010). Much depends on whether they are meaningful, are linked to effective accountability mechanisms and to monitoring and reporting processes (Durant et al, 2004). This also requires us to consider the various processes by which emerging policies, plans and programmes are subject to careful consideration for environmental consequences, and to ensure that at every stage of a tiered decision framework due weight is given to serious environmental risks and their mitigation.<sup>1</sup> Simply declaring the importance of environmental targets risks having little effect (NAO, 2020) unless procedures ensure that the plan’s feet are

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<sup>1</sup> Also, it is important to acknowledge the co-existence of top-down and bottom-up tiering of goals and actions. This was observed, described and reflected on for the UK, the Netherlands, Germany and Brazil by Fischer (2002a), Arts et al (2005) and Malvestio et al (2018).

consistently held to the environmental fire from beginning to end - and beyond, through monitoring and, if needed, through corrective action.

Before we turn to outline our specific ideas for action, we outline briefly the Scottish approach to SEA for local plan-making, and the ways in which the setting for SEA is likely to be affected by the 2019 Act reforms.

## **2.2 The shifting Scottish context for SEA and local plan-making**

SEA occupies an important position in Scotland's environmental governance system. The EU SEA Directive has been extended by the Scottish Government to go beyond the plans and programmes mentioned in the Directive to enhance the environmental protection measures applied to virtually all its public sector programmes, plans, policies and strategies (PPSs), through SEA legislation (Scottish Parliament, 2005) intended to enable 'Scotland to be a world leader in SEA' (SEEG, 2004, p.1). The Scottish Government has identified three aims for SEA (ibid., Section 1.3):

- contributing to the [Scottish Government's] aim of improving the Scottish environment and making Scotland more sustainable;
- improving policy making by ensuring that environmental effects are fully considered at an early stage in policy formulation and that the environmental effects of different options are assessed;
- promoting more open government by allowing the public and interested organisations to comment on environmental reports; and obliging public bodies to explain how they have taken such comments into account.

Accompanying its 2005 legislation, the Scottish Government established a number of complementary arrangements to deliver these aims (Jackson and Illsley, 2006). A non-statutory Scottish SEA Gateway was created to provide a 'focal point for advisory, co-ordinating and management information functions' (SPCB, 2005). In addition, the Scottish Government was required to table an annual report to the Scottish Parliament on SEA performance; the Gateway has organised regular SEA forums open to practitioners since 2010; a Planning Advice Note on SEA of Development Plans has been issued (Scottish Government, 2010), as has guidance on SEA itself (Scottish Government, 2013); and two SEA performance reviews have been undertaken.

These reviews (SEPA, 2011; LUC, 2018) affirmed widespread organisational support for SEA, but also identify familiar problems (McLauchlan and João, 2011b): an ambivalence among planning practitioners about the merits of SEA; insufficient integration between assessment and plan-making, especially around identifying, assessing and selecting key options, and poor follow-up on the delivery of mitigation measures. These conclusions support our view that there is a need to think through how plans might link to key, national objectives; and how that, in turn, might aid

efficient SEA through focus on areas likeliest to have greatest environmental effects, and the demonstration of beneficial outcomes.

Although successive Scottish Governments have been strongly committed to SEA, and reflective about its performance, the reforms to the planning system introduced by the Planning (Scotland) Act 2019 were not driven by concerns for the environmental performance of the planning system or to resolve weaknesses with SEA. Nevertheless, the reforms re-structure the planning and plan-making process in a number of important ways, including:

- extending the period between plan revisions from five years to ten years;
- the ending of Major Issues Reports and their replacement with a draft plan/proposed plan.
- new proposals for early ‘gatechecks’ on ‘evidence reports’
- new points of strategic direction on ‘long-term public interest’ and ‘sustainable development’
- enhancing the status of the National Planning Framework (NPF4), in turn facilitating streamlining and a greater delivery focus for local development plans.

The precise operational details of many of these reforms are still being worked through at the time of writing (November 2020). The various changes clearly recast the context for SEA, and much depends on how they are operationalised. In the next part of our think piece we outline a series of steps that could help to further embed the environment into planning through SEA. We discuss how our ideas relate to the emerging reformed planning system, both where they build on them and follow the direction of travel, but also where the reforms present problems for environmental integration in local development plans.

### **3.0 Steps for embedding the environment in local development plans**

In this section, we first consider the Scottish strategic environmental governance context. This will be followed by an elaboration of pre- and early plan assessment options.

#### **3.1 *The strategic environmental governance context***

A central plank of our argument is that embedding the environment into local plan-making requires the institutionalisation of firm environmental goals for the planning system, such that efficacy in delivering environmental outcomes forms part of its core purpose. On the face of it, Scotland has a dense architecture of environmental governance arrangements, which might serve this purpose. However, closer inspection raises questions about the precision, ‘bite’ and direction of existing environmental goals; about their integration with – and appropriateness to –

planning, and the extent to which they are actually mobilised within assessment processes to review and steer plan options, halt patently unsustainable choices and drive effective mitigation.

For example, the Scottish Government has developed a performance framework that draws on the global Sustainable Development Goals (SDGs), adopted by the United Nations General Assembly on 25 September 2015 (SDG Network Scotland, 2020). The 17 goals alongside 169 targets and over 232 indicators together set a global agenda until 2030. Whilst the SDGs provide a common framework for action, various SEA commentators (e.g. Morrison-Saunders et al, 2020; Fischer, 2020) have pointed out that it is difficult to apply a set of 232 indicators in any one process, not least because trade-offs will become necessary (and should be made transparent) between, for example, certain economic targets and environmental goals. Furthermore, questions arise about the tightness of the relationship between the Scottish performance framework, the SDGs and planning, and how the SDGs translate into effects on planning decisions. Similar ambiguity surrounds other high-level policy commitments. SEA was identified as the principal tool by which Scotland's commitment to environmental justice was to be delivered (SEEG, 2005) but very few SEAs have ever taken this forward (McLauchlan and João, 2011). Likewise, duties to 'have regard to biodiversity' of the Nature Conservation (Scotland) Act 2004 appear to have achieved little (SP ECCLRC, 2020, p.19): a classic example of 'weak' integration.

Other components of Scotland's environmental governance system, notably climate change legislation<sup>2</sup>, do much more to institutionalise a firm outcome focus, through quantified carbon budgeting frameworks and interim targets, all linked to specified time frames (Reid, 2012). The result is a 'harder-edged' framework that provides a basis for progress monitoring, adjudication between options and holding decision-makers to account. The problem here is that the links to planning are less direct. In part – and arguably desirably – climate change targets are reflected in subsidiary targets for climate-compatible categories of development (e.g. renewable energy targets) but there remain significant omissions. In particular, land- and nature-based strategies that may support climate change mitigation and adaptation largely fall outside these systems of goals and targets. A more thorough integration of nature-based solutions within climate change governance could shift expectations of how the land allocations of plans are pieced together, a point we return to below.

Valuable lessons for what firm goals and assessment processes can achieve together for embedding the environment into plan-making can be taken from the experience of the EU Habitats Directive and 'appropriate assessment': a procedure required when competent authorities consider that a plan will have a 'likely significant

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<sup>2</sup> Climate Change (Scotland) Act 2009; as amended by the (Climate Changes (Emissions Reduction Targets) (Scotland) Act 2019



effect' on a Natura site. If this is the case, they must carry out an 'appropriate assessment', and firm tests then apply: i.e. a competent authority must not authorise a plan or project unless it can show beyond reasonable scientific doubt – using appropriate assessment – that the plan or project will not adversely affect the integrity of a Natura site. A plan with potential for adverse effects on a Nature site may be consented, but it needs to be shown *inter alia* that there are no alternatives, and the provision of adequate mitigation measures may be necessary (Scott, 2021).

What makes appropriate assessment relevant to our thinking is the firmness of the tests that apply, the linkage to the consideration of plan alternatives, and the limits that are imposed on the scope for trade-offs that could lead to serious effects on environmental goals. It is, in effect, a good example of 'strong integration'. Importantly, it does drive tangible results. For example, in various parts of southern England, the risks identified as arising from increased nutrient loading to the integrity of wetland Natura sites have driven a temporary halt to development plans while the threat is further investigated, and channelled revenue into strategic-scale mitigation – most spectacularly, the rewilding of significant areas of agricultural land to achieve balancing reductions of nitrate loading (Salvidge, 2020). Firm, specific goals also facilitate meaningful mitigation, because they translate into more precise requirements for mitigation measures, enabling better oversight of delivery. This in turn can set the framework for project EIA and development management, and make downstream monitoring of delivery easier.

This shows that there are parts of the planning system where we already assess whether plans are compatible with, and help to deliver, firm and specific environmental standards, embedding the environment into plan-making in ways that are not negotiable. Arguably this kind of thinking could be extended to other environmental standards. In the Netherlands, EU air quality legislation has had a determinate effect on land use planning, ruling out land allocations where limit values are violated (Van Ravensteyn and Evers, 2004). A similar logic could be applied to water quality and flooding, biodiversity enhancement goals, or aspects of decarbonisation. Whether such steps would require new legislation is a matter that falls outside this think piece and requires further research.

Not all targets need to be purely quantifiable to have strategic value. One area of potential innovation is to consider how one might give strategic spatial presence to the land requirements for accommodating societal and ecological demands for biodiversity enhancement, offsetting and restoration, and the delivery of ecological services (for e.g. flood management, carbon restoration, air and water quality, accessible greenspace). The logic of such a target – in terms of environmental integration – is to find a device by which the spatial requirements of environmental goals enter the planning system at a similarly early stage, and with at least comparable weighting and robustness, to the land demand of housing and other forms of development which are given so much attention. The outcome would be to



ensure that sufficient space in the most effective locations is provided to deliver on environmental goals, and that this is planned strategically rather than via the ‘serendipitous small-scale solutions’ (Cowell, 2006, p.16) that tend to arise as a by-product of built development, or leftovers from planning gains.

Scottish Governments are clearly not averse to space-based targets (witness the goal of achieving one million acres of land in community ownership by 2020, in NPF3, para 2.29), but some thought is required as to how the land demands of tackling the climate and nature emergencies relate to tangible, measurable characteristics of performance. Some of the input might emerge ‘bottom up’, from local planning authorities and their citizens promoting ideas and spaces for environmental purposes, as strategic projects, and from reflecting on the impact mitigation and environmental enhancement demands that arise from development. Ultimately, spatial adequacy may be judged according to outcomes criteria (e.g. river levels/flood risk, wildlife populations, air quality, etc). But the spatial disposition of such land – where it is, how connected it is – is also integral to what it can deliver, and so may require a strategic presence in plan-making, that is not reducible to outcome parameters alone.

There are predictable objections to this emphasis on objectives and targets. One is that giving priority attention to the consequences of plans for specific environmental objectives diminishes the flexibility and discretion that, for some, is the hallmark of planning. We would disagree. Focusing on the effects of plans on environmental outcomes – as *ends* in themselves – offers considerable, appropriate flexibility to local planning authorities and developers on the *means* by which those ends are achieved (Durant et al, 2004). We are simply arguing that there should be less flexibility in the planning system to derogate from those ends. Some of the apparent inflexibilities *for land use planning* diminish if plan-formulation and SEA are seen not just as delivering policy outputs within a planning silo, but as a mechanism for gathering intelligence for a wider policy system, where better strategies for (policy) alternatives and effective mitigation may lie. So, for example, if plan formulation suggests mounting flood risk from expanded housing development, the best solution may lie in expediting changes to agricultural practice or forestry and better spatial targeting. As we explain in section 3.4 below, there is largely untapped potential for the SEA of plans to inform cross-sectoral policy learning, in a more integrated system for sustainability policy.

Although there are challenges, there are undoubtedly pressures supporting the case for instituting firm environmental targets for planning in Scotland. One source of pressure is a key component of the 2019 Act reforms: that plans should last for ten years between revisions, rather than five as before. Ten years is a long time to persist with plans that are under-performing, environmentally, and which are insufficiently responding to climate and nature emergencies. Action deferred or watered down is more costly to correct in future. It is consistent with the inter-

generational justice dimension of sustainable development that action is taken to ensure that the new round of longer-lasting development plans are on target to deliver on the environment, and not locking-in under-performance and storing up problems. Such would be a very meaningful interpretation of section 3ZA of the 2019 Act, that '(t)he purpose of planning is to manage the development and use of land in the long term public interest'.

Other sources of pressure emanate from the international sphere. The lack of clear objectives for biodiversity in the UK (NAO, 2020) is likely to become untenable, as policy-makers, scientists and negotiators consider 2030 and 2050 goals for nature to include in the UN's Convention on Biological Diversity. Scientists have called for a 'safety net' made up of multiple, interlinked and ambitious goals to tackle nature's alarming decline (Diaz et al, 2020). Given that development plans designed to last ten years must take us a substantial way towards 2030 biodiversity targets, it is vital that 'making space for nature' is instituted as a goal for planning in a non-negotiable way.

The other source of supra-national pressure arises from Brexit, and the desire of the Scottish Government to maintain alignment with EU environmental standards. This is highly relevant because many EU environmental directives are characterised by 'harder edged' quality standards and time frames. This reinforces the argument for utilising SEA to help ensure that the planning system fosters actions that help to comply with these standards. SEA is also deeply implicated in Scotland's prospective alignment with EU environmental principles – 'precaution', 'preventative action' to avert environmental damage, and 'rectifying environmental damage at source'; for all of them, stronger environmental direction for planning would be a key tool. Moreover, the Scottish Government set aside the incorporation of the EU 'integration principle' into the European Union (Continuity) (Scotland) Bill on the grounds that SEA adequately fulfils this environmental embedding function (SPECCLRC, 2020, p.16).

Elevating the status of environmental goals and their status in plan-making is a critical vehicle for driving their integration into plan-making: both as standards to be met and as a strategic claim on space. In short, meaningful 'embedding' must receive impetus from the top; front-loading needs action right at the front, in the strategic policy context. In Scotland, this makes the new National Planning Framework 4 (NPF4) a key policy tool in creating a suitable environmental framework for plan-making.

### 3.2 *Assessing the pre- or early plan*

Creating a framework of appropriate objectives is a critical ingredient for mainstreaming environmental concerns in plan-making, but insufficient without also taking steps to ensure that those goals are given careful consideration throughout the plan-making process. There is a need to start at the very beginning and here SEA can help.

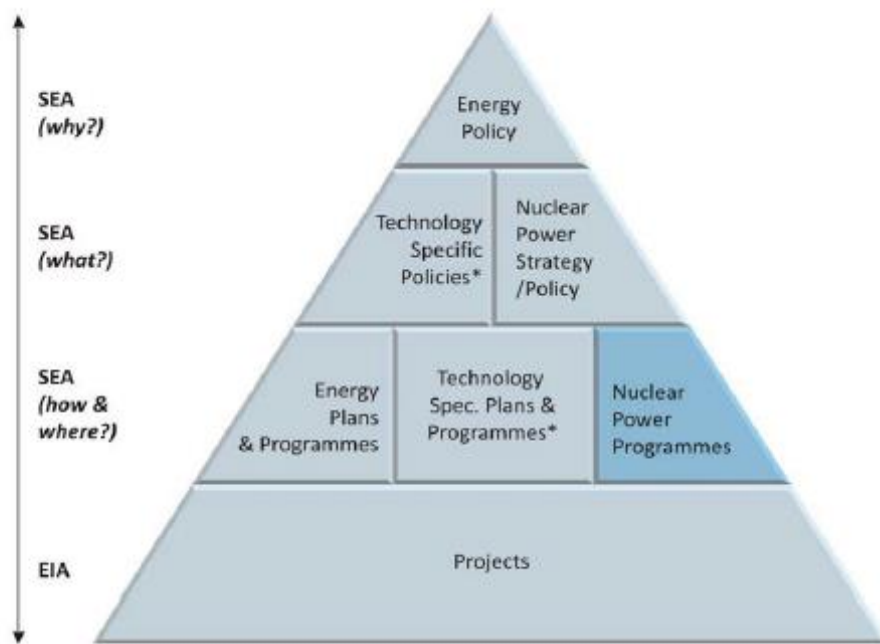
It is a well-established truth that SEA is more effective in steering plan-making towards greener options, and preventing harms, if it is integral to plan-making from an early stage in the process (Bina, 2008; Philip-Jones and Fischer, 2015). This enables assessment to support the deliberation and evaluation of meaningful alternatives at a stage where issues and plan objectives are being identified and problems are still being framed (Bundesministerium für Verkehr, 2018).

There are different pathways for ensuring SEA is applied early on in plan making, with two having particular relevance in this context:


- (1) SEA applied within a tiered framework, consisting of strategies, policies, plans and programmes, where each of the tiers is allocated specific tasks, issues and alternatives and where SEA is used to pro-actively steer environmentally sustainable actions and outcomes;
- (2) The SEA process applied in a particular strategy, policy, plan and programme (SPPP) situation, where screening and scoping start either at the same time or before the beginning of the SPPP process and extend beyond its end (through follow-up and monitoring).

#### 3.2.1 *SEA within a tiered framework*

The advantage of the framework approach to SEA has been acknowledged by a number of organizations and agencies. Whilst this is not to be understood as a strict top-down system, it can help streamline the preparation of strategies, policies, plans and programmes and associated SEAs by establishing clear ideas about what should be considered and how, and at what level. Figure 1 shows how the International Atomic Energy Agency (IAEA, 2018) has been approaching this framework approach in their nuclear power programme SEA guidelines. In this example, with a clear understanding of what issues are (or should be) addressed elsewhere, it is possible to devise a clear focus for programme SEA. Whilst this focuses on the energy sector, Local Development Planning can be approached in a similar way. Different tiers of plans are likely going to be associated with administrative levels (national / regional / local). Using this approach would mean a focused SEA is applied prior to the actual LDP SEA, which would determine what issues and areas are to be protected and which may be allowed to progress into the LDP preparation process.



\* There may be a range of energy policies, plans and programmes, including for various renewable and non-renewable energy sources.

 Focus of guidelines.

Note: This pyramid does not reflect a top-down approach; rather, it indicates that there are usually more projects than plans and programmes, as well as more plans and programmes than policies.

**Figure 1: energy decision tiers, questions to be addressed and focus of IAEA guidelines; Source: IAEA, 2018.**

An international example where SEA preceded plan-making in a tiered approach is provided by the Rustenburg Local municipality in the North West Province of South Africa (2003). The trigger in this case was the establishment of a significant number of new mining (mainly platinum) operations within, and in the vicinity of, the Rustenburg local municipality. The rapid rate of development was observed to have had numerous cumulative and synergistic environmental effects in the region. There was either weak or a lack of strategic development planning at provincial, sub-regional and local levels, which meant that any development decisions were dealt with on an ad hoc basis. EIA proved to be unable to effectively deal with strategic issues. This led to SEA being identified and use for developing a strategic framework for the municipality (Retief, 2007).

In Scotland, a highly pertinent illustration of the importance of the tiering pathway to the early integration of SEA in the planning system is the creation of new National Planning Frameworks i.e. NPF4. The importance of ensuring that NPF4 is subject to careful SEA is increased by the enhanced status that this document is to perform in the post-2019 Act system, especially so given that NPF4 will include policies, infrastructure and other strategic projects, some of them 'uploaded' to the NPF from sub-national arenas of planning.

### 3.2.2 *The SEA process*

The procedural approach to linking SEA to early stages of plan-making currently follows the European SEA Directive. In this context, screening is often based on the generic inclusion of certain types of plans (e.g. LDPs). Furthermore, scoping usually includes a depiction of the baseline of a strategy, policy, plan or programme area and introduces the issues and alternatives to be considered in the further SEA process. The analysis and assessment of the potential significant environmental impacts follow on from that. Decision-making is usually not just informed by the SEA, but by other assessments and studies, including e.g. health impact assessment, transport impact assessment and others. There is also a requirement for monitoring and follow up. Importantly, SEA acts as a platform for public debate.

In most instances, SEA scoping runs in parallel to the making of a strategy, policy, plan or programme, starting at the same time. However, there is no reason why SEA scoping cannot happen *before*, therefore informing that process right from the start.<sup>3</sup> An international example in this context is SEA in Estonia where the discussions in SEA frequently inspire, inter alia, planners to consider options that otherwise would have not been considered. This was described by Faith-Ell and Fischer (forthcoming 2021) for the SEA of the Saaremaa Fixed link plan (the biggest Estonian Island in the Baltic Sea). For this, various strategic choices were assessed, based on overall objectives before any further planning was started.

Another European example where SEA preceded plan making is provided by the Stockholm Regional Development Plan, where this sequence was more accidental than intentional. On this occasion, the SEA was said to have led to major changes in the way the regional plan was approached strategically in 2008. This resulted in the plan being restarted in 2009 after the SEA had been prepared (with another 'new' SEA running in parallel to the plan making process; Borglund, 2011).

### 3.2.3 *Pulling the 'call for sites' into SEA*

Features of the Scottish planning system – notably the call for sites process – create challenges for linking plan formulation to the SEA process and, in turn, for making sure that environmental objectives are used to gauge all emerging proposals from an early stage. Moreover, reforms arising from the 2019 Act risk further problematising

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<sup>3</sup>When reflecting on practices of SEAs being prepared prior to plan making, it is also of interest to note what is currently happening with regards to project EIA. Here, in the UK, it has become routine practice to conduct pre-studies before starting with the project consent process. However, and somewhat concerning, pre-studies on e.g. different alternatives are done informally and outside EIA or SEA. This means site-specific decisions are usually already made when EIA is applied (Jha-Thakur and Fischer, 2016), without adequate scrutiny or participation.



‘early plan assessment’, because dropping the Major Issues Report creates some ambiguity around the best focus for early plan discussions.

The consultation paper on the future of the Scottish planning system (Scottish Government, 2017a) set out proposals for change stemming from the findings of the independent review of the Scottish planning system. The resulting position statement (Scottish Government, 2017c) committed the Scottish Government to implementing changes in the planning system intended to deliver (amongst other objectives) stronger LDPs. These included changes designed to increase community involvement in preparing new LDPs, as well as enabling environmental considerations to be applied to the initial shaping of the spatial strategy of a new LDP. Dropping the Main Issues Report (MIR) and supplementary guidance, the process of preparing a new LDP would instead involve what is termed a ‘gatecheck’. This would require Scottish planning authorities to start new LDPs by preparing an evidence base designed ‘to better frontload scrutiny within plan examinations’ (ibid.p.5), that would be subject to approval in a public examination led by a Reporter before the LDP was allowed to proceed to consideration of detailed proposals.

Since the 2019 Act came into effect, further details have emerged on the new approach to preparing LDPs (e.g. Scottish Government: 2019a; 2020a). The latter paper offers a concise summary of the new stages involved in preparing LDPs, with those requiring the application of SEA indicated by bold type:

1. Preparation of **Evidence Report & SEA scoping**<sup>4</sup>
2. Gatecheck
3. **Preparation of LDP** and consultation on **Environmental Report** (alongside other early-engagement activities, call for views/sites, options & alternatives - a draft plan?)
4. Council approves Proposed Plan
5. **Proposed Plan** published for consultation (with **ER addendum**)
6. Proposed plan modified
7. Proposed plan submitted for approval
8. Examination
9. Modifications
10. **LDP Adoption/ SEA Post adoption statement**

Some important issues remain unresolved within this new process for preparing an LDP, one of which concerns the removal of the MIR and where any ‘call-for-sites’ might figure in its absence. Current practice offers little guidance in this respect. Reviewing the site allocation process applied in plan-making under the existing arrangements, the Ryden LLP (2020) report noted that the relationship between calls

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<sup>4</sup> We suggest that both approaches introduced above could be used here; a ‘pre-plan SEA’ or a more comprehensive SEA scoping stage



for sites and SEA varied significantly between Scottish Planning Authorities (SPAs). Ryden stated that for most LDPs this process appeared to be driven primarily by concerns for (physical) deliverability of the sites that might be allocated, with 'environment' viewed only as one of a number of constraints on deliverability (rather than how development might affect the delivery of environmental goals).

The Ryden report also found that for most SPAs at present 'the assessment of called-for sites comes before the Strategic Environmental Assessment' (para.4.13.3). Although identifying considerable variation between SPAs in the extent of 'spatial planning ... at the site allocation stage' (p.6), the report concluded that most of the LDPs produced by SPAs were currently led in their plan-making by the sites being offered. Ryden identified some linkage between site identification processes and SEA, with a number of SPAs seeking the advice of the CAs and environmental NGOs on site deliverability assessment, while other SPAs were described as more 'market led'. However, although environmental dimensions are included in the staged assessment matrices that the Ryden report proposes to resolve such issues, with more being asked of the larger sites (e.g. proximity of designated sites, flood risk); there is no suggestion that linkages with SEA could be tightened. Ryden's proposals do little to narrow the current gap between the existing 'call for sites' and the application of SEA.

This leaves the relationship between site selection and SEA under the new arrangements unresolved. Our respondents told us that a draft environmental report produced under present practice, generating detailed discussions between an SPA and CAs, tends to be focused on the material presented in the MIR. Its removal leaves the task of applying an environmental report without any clear focus on a specific post-gatecheck stage of plan-preparation. The crux of the problem (as set out in the above set of stages involved in preparing LDPs under the new arrangements) is the shift in terminology from a 'draft' plan that remains subject to amendment and can be modified by the findings of an ongoing environmental assessment, toward a 'proposed' plan. In current usage this tends to refer to the settled view of the SPA, which has already incorporated SEA findings and assessed possible options and alternatives.

One suggestion on how to tackle this issue came from a CA respondent, who recommended either the insertion of a non-statutory consultation step around a post-gatecheck 'call-for-sites', or alternatively a redefinition of what is meant by the term 'proposed' plan. In the absence of such a non-statutory consultation stage around which to focus the detailed considerations that make up an environmental report, continued failure to clarify the distinction between 'draft' and 'proposed' plans would make the task of applying SEA to this stage of LDP preparation more challenging. The same respondent went on to observe that under the existing regime for preparing LDPs, 'proposed plans' were typically only accompanied by an addendum

to the environmental report, since the primary public engagement phase for seeking feedback on options and alternatives had already occurred with the MIR.

Other responses on this topic indicated a common desire to deliver a system which was plan-led, applying a spatial strategy to the call-for-sites process that had already been tested by SEA. One response emphasised the need to undertake SEA scoping at stage 1 of plan preparations with a view to formulating a clear spatial strategy for the LDP<sup>5</sup>. After a successful gatecheck examination, the spatial strategy could then be applied to a ‘call-for-sites’ at stage 3, when preparation of the LDP and consultation on its accompanying environmental report would commence. This stance received strong support, with some respondents firmly of the opinion that it would be inappropriate under the new system to undertake a ‘call-for-sites’ prior to the adoption by an SPA of a spatial strategy which has been shaped by the application of SEA. The following extract sets the tone of the argument:

“the environmental assessment should influence the spatial strategy on which a ‘call-for-sites’ should be based. This will also add to efficiency in that (a) sites would only be accepted if they fit with the agreed spatial strategy and (b) sites will only be assessed (and commented on) once.”

If it is desirable, as we have suggested above, that plan-making should be more closely geared to the delivery of environmental and not just development goals, then it is vital that the market logic of ‘calls for sites’ unfolds within a spatial and policy framework designed to deliver those environmental goals.

Further devices may assist in bringing the ‘call for sites’ within SEA. We have constructed a matrix for an initial assessment of development sites that combines development and environmental objectives, bringing the latter to the fore (see Annex 1). A more radical suggestion – but consistent with a conception of planning in which environmental goal delivery is a central obligation – is to further reconstruct such site assessment matrices to deliver this kind of test. In Annex 2 we have provided an illustrative fragment of what such a matrix could look like.

Additional innovations are possible. The ‘call for sites’ does not need to focus on built development alone; it could be extended to embrace sites put forward for environmental purposes – e.g. flood risk amelioration, biodiversity enhancement/offsets, carbon storage etc. This may provide a positive environmental contribution to place-making and community input. It may also offer scope for local public input to the process of identifying sites for biodiversity and environmental enhancement that could otherwise be subject to a strongly marketised and opportunistic logic (Fair, 2020).

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<sup>5</sup>Which could take the shape of a pre-plan SEA

### 3.3 Supporting the process of environmental embedding: better liaison, better data

One of the systemic challenges in achieving greater integration in plan-making – in this context, of embedding environmental goals firmly into the process – is that discontinuities in staffing can undermine capacity, focus and momentum (Fischer et al, 2013; NAO, 2020). Integration does not unfold automatically, like clockwork, but requires people on the ground at all levels to ensure that the process moves in the right direction. Embedding requires bodies (Collins et al, 2009): i.e. staff, with resources, skills and capacity. This pertains to the role of the CAs, not least because they are the key actors that are most consistently engaged in pushing SEA across local planning authorities (LUC, 2018). In addition, the kind of environmental goal-orientated planning process we suggest (in 3.1) would involve targets and objectives that fall into their purview. However, it also requires SPAs to take some ‘corporate ownership’ of responsibility for environmental goal delivery.

In this subsection we address the means – procedural and technological – that might help to ensure that emerging plans maintain and deliver on this environmental focus, giving particular attention to issues of consultation, organisation and data.

#### 3.3.1 *Early liaison – progress to date*

The CAs and other public sector agencies involved in the Scottish planning system have long recognised that to enhance environmental considerations in the production of new LDPs it is important to encourage SPAs to make SEA an integral part of their planning procedures, right from the start of drawing up plans and throughout all the subsequent stages. In their responses to our enquiries on this matter, CA respondents have told us they are trying to achieve this goal by advocating the concept of integrated SEA/planning preparation and management to those who deliver the development planning process. An integrated approach would allow environmental considerations to be embedded at the outset of LDP preparations. After the final approval of a new LDP, such an integrated approach would also ensure that environmental considerations remained active during its implementation through development management of the area and into the preparation of the area’s successor plan. Success in mobilising this argument has been variable.

Current arrangements for the environmental assessment of new LDPs vary across SPAs. Since all new LDPs are subject to SEA under the Environmental Assessment (Scotland) Act 2005, there is normally no need for screening. Liaison between an SPA starting a new LDP and the CAs is usually triggered by the requirement for SEA scoping. For some SPAs it is standard practice to hold a joint meeting with the CAs prior to preparing and submitting their scoping report. This may also be attended by

other ‘key agencies’ such as Scottish Water, Forestry Commission Scotland, Transport Scotland and Scottish Enterprise. We have been advised by the CAs that they consider this to be good practice, since it promotes early engagement.

Considerable progress has been made in recent years to promote early engagement between SPAs, CAs and other key public agencies in the preparation of LDPs. The establishment of a Key Agencies group helps facilitate this engagement. The Key Agencies group works to help shape the engagement of SPAs with CAs and other pertinent public agencies both at the start of any new LDP, and throughout the subsequent process.

The group embraces all the public bodies engaged in Scottish planning and development decisions, and actively pursues ways of promoting better outcomes in preparing LDPs. In its ‘Statement of Performance 2017-18’ the group observes that:

“A key theme emerging from the Key Agencies Peer Review Session has been recognition that better outcomes can be achieved by collaborating positively ‘upstream’ in the planning process, rather than through regulation. There has therefore been a shift in approach with Agencies prioritising positive and innovative ways of joint-working early in the planning process, over working reactively in response to consultations. Through these approaches, it is believed that our partners across the planning system will see environmental success as an opportunity, not a barrier to, economic and social success” (p.1).

The same report outlines the engagement of Key Agencies in a range of activities focused on supporting the delivery of planning reforms designed to embed the environment in the preparation of new LDPs.

### *3.3.2 Establishment of SEA Advisory and Evaluation Teams*

It is essential to ensure that the resulting information and advisory functions provided by CAs for SEA purposes are tailored to the delivery of the two separate but linked stages of plan preparation: the evidence-base tested by the initial gate-way public examination; and the production of an environmental report prior to adoption, tested by another public examination. The material provided for these purposes should be collated in a way that offers a consistent and coherent framework to the planning authority team as required throughout the whole two-to-three years period of LDP preparation.

The impending launch of a new digital platform for Scottish planning, taken together with evolving best practice by CAs under current arrangements for preparing LDPs noted above when responding to SPA requests, suggests that it would be helpful to place all communications between SPAs and CAs on a more formal footing. In our view this would recognise current best practice amongst CAs and other key agencies

dealing with planning issues, and it would also encourage SPAs to emulate this by establishing planning teams for preparing their LDPs that drew fully on the environmental expertise in their own authorities.

The Scottish Environmental Protection Agency (SEPA) and NatureScot operate largely on a territorial basis, which allows individuals to be tasked with responding to formal enquiries from SPAs on the same basis. Although Historic Environment Scotland (HES) does not operate on a territorial basis, it also designates a lead officer for the preparation of a new LDP and its corresponding SEA. These arrangements enable CAs effectively to designate their own project manager to provide advice to the planning team charged with delivery of a new LDP, both on the contents of the plan (discharging its duties as a Key Agency) and on the way in which SEA should be applied to its contents (as required for its role as a CA).

This use by CAs of a single lead officer for each new LDP follows longstanding good practice, designed to provide each SPA team responsible for preparing a new LDP with a clear communication channel to a specific person who has detailed knowledge of the issues concerned, access to the relevant environmental data, and familiarity with LDP and SEA procedures. The lead officer can draw on further advice across the CA as required when reviewing specific proposals or policies. In commenting on these arrangements, one of our CA contacts made a good case for claiming that placing these responsibilities in the hands of a lead officer offered significant efficiencies in how the CA managed its consultation and advisory service. It should be noted that these arrangements also extend to advice provided for other casework involving SEA.

Responses from some of our other contacts reported similar arrangements, allowing strong working relationships to be established both with the SPA teams preparing new LDPs, and with their fellow CA responders. As noted above, we were told of regular meetings with LDP teams during or following SEA scoping of LDPs, and opportunities to discuss methodological issues between CA responders as appropriate. Each CA is already formally required to copy the others into its statutory responses, and this serves both to ensure a consistent approach and good dissemination of information on progress with the LDP amongst CAs at key stages. We believe it would be valuable to build on and strengthen these arrangements so that they operate to best effect in coping with the front-loading of some of the environmental assessment tasks required under the new arrangements for preparing LDPs, and also to deal with the subsequent removal of the Main Issues report stage which has hitherto attracted much of the focus of communications between LDP teams and CAs.

Drawing on current best-practice, we propose that these arrangements should be formally recognised by according the lead officers in each CA assigned to the co-ordination of SEA advice and evaluation for each new LDP the status of team



members responsible for overseeing the progress of preparing a new LDP. Each CA would be asked to appoint a specified individual to co-ordinate its subsequent SEA advice and evaluation, with the three selected for this task forming a group that might be known as the *SEA Advisory and Evaluation Team (AET)* for that LDP. At each stage of the process of preparing the LDP, including the initial evidence base, the appointed individuals would serve as lead officers and be responsible for obtaining from their own CAs the information and providing the advice sought by the SPA planning officers involved. This advice and information would be co-ordinated and approved by the AET (through regular scheduled remote meetings) before being passing on to the SPA via the SEA Gateway, with a view to ensuring that it was coherent, comprehensive and non-contradictory.

We recognise that lead officers in CAs already discharge most of the functions that we have identified for AETs. However, we believe that giving formal recognition to such lead officers in this way would enhance the status of such individuals in their dealings with SPAs, and would also strengthen the commitment being made by all involved in preparing new LDPs to embed the environment in this process. As set out in sections 3.2.2 and 3.2.3 above, the AET created for each new LDP from the outset of its preparation would start by offering input into the LDP's initial development scheme and the compilation of its evidence base (Stage 1), possibly within the context of a pre-plan SEA. It could then offer guidance for the gatecheck, including site assessments, leading to the initial public examination before a reporter (Stage 2). This would be followed up by input to the subsequent SEA applied to the detailed proposed plan and the resulting Environmental Report accompanying this stage (Stage 3). After adoption by the council and subsequent public consultation (Stages 4, 5, 6 and 7), this would lead to the public examination of these proposals and their SEA before a reporter (Stage 8). The assigned AET would not be stood down by CAs until receipt of the SEA post-adoption statement for the LDP.

The SEA AET for each new LDP would not only have the task of providing guidance to the planning authority drafting the LDP, but also be in a position to co-ordinate inputs from the three CAs to offer an evaluative opinion via the SEA Gateway to the Reporter at both stages of the public examination of the process. Although this is not a task which CAs are called upon to perform regularly at present, giving this dual advisory and evaluative role to the AET would enhance the input of CAs to the scoping elements of an SEA at the outset, and their input to the application of the tools of SEA to the subsequent specific set of proposals leading to the LDP environmental report. The team appointed to co-ordinate and oversee the provision of information and advice to a planning authority in the preparation of a new LDP is also the one best placed to evaluate the resulting SEA processes applied by the planning authority to its new LDP at Stage 1 and Stage 3.

It follows that for the Stage 2 gatecheck and the Stage 8 examination, the same team would be best placed to offer evaluative inputs to the Reporter undertaking the



examination to establish whether the resulting SEA at each stage adequately reflects the guidance provided to the planning authority on the environmental aspects of that part of the LDP. Giving this dual advisory and evaluative role to such a team would enhance the input of CAs to the screening and scoping elements of an SEA at the outset, and their oversight of the application of the tools of SEA to the subsequent specific set of proposals.

In terms of resource implications, as already noted this proposal essentially recognises and formalises existing best practice. If the new digital platform being launched for planning can be effectively applied to support the work of AETs, we consider it should not increase existing pressures on staffing or resources. It is a strength of current practice that each new LDP would have its own unique three-person team drawn from the CAs. One of the merits of allocating a different team to each new LDP would be to widen the experience of the staff of CAs in dealing with formal SEA requests from SPAs, and in providing evidence on environmental issues at public examinations of new LDPs prior to their adoption.

Integral to our argument above is that SPAs should better emulate the kind of coordination around the SEA process exhibited already by the CAs, and further cemented in the AET concept. Planning authorities can sometimes exhibit the internal sectoralism that leads to the SEA process being largely marginal to the work of, for example, transport departments, environmental health or flood risk management. Cross-cutting teams within each SPA for SEA, with clear lines of leadership would be helpful. Instituting greater responsibility for environmental goal delivery in plan-making might be expected to drive such collective responsibility, by making plan performance a shared problem and SEA a key vehicle for evaluating progress.

### *3.3.3 State of the Environment reports as standard*

Current SEA arrangements require the establishment of an environmental baseline, against which development proposals can subsequently be assessed for their potential environmental impact. Practice across SPAs varies considerably at present in this respect. Some SPAs already produce their own State of the Environment (SoE) report, which is regularly updated and designed to offer the planning team responsible for drafting new LDPs a ready source of information on the environmental baseline covering the area for their LDP. Other SPAs do not maintain an updated SoE for their authority, and leave the establishment of an environmental baseline for the new LDP to the team charged with producing a new LDP.

Section 4 of the 2017 Places, People and Planning Position Statement (Scottish Government, 2017c) includes a number of matters that could be tested within the new gatecheck for approving the preparation of a new LDP, notably whether there is an adequate evidence base (including environmental assets and constraints).To

fulfil these requirements, individual SPAs will need to demonstrate from the outset that they can establish an environmental baseline for their new LDPs along with the determination of sites that should be protected and an identification of sites that may be suitable for development).

Although much of the information for doing this is already accessible from the on-line websites maintained by the CAs, there is currently no obligation on SPAs to produce SoE reports for their areas of responsibility. Scotland also lacks the means to deliver a standardised approach to the delivery of environmental baselines. Given the frontloading of environmental considerations sought by the new requirements for preparing LDPs, in the form of an evidence-base that has to be approved in public examination prior to further preparation of a new LDP, we consider that current best practice with regard to SoE reports should be adopted by all SPAs. Each SPA should be required to produce and regularly update a SoE report for the whole of the area it administers. This would provide the information required to compile an environmental baseline for any new LDP produced by the SPA. Making regularly-updated SoE reports a standard requirement for all SPAs would also enable a comparison of the approaches towards environmental considerations undertaken by SPAs, as well as providing a readily-accessible means of monitoring over time the effects of development plans and associated local authority activity on their local environment.

A best-practice example of the use of SoE reporting in Scotland is the State of South Lanarkshire's Environment 2019, which covers the following topics: population and human health; biodiversity, fauna and flora; historic and cultural heritage; material assets and landscape; waste; soils; air, noise and light; water; climate change; and transport. This is now in its sixth edition, and it lays the foundations for undertaking the environmental evidence work whenever this SPA embarks on the evidence-stage of preparing a new LDP, or any other council-led plans that are subject to full SEA. The fact that the environmental baseline is already clearly mapped out beforehand through a continually revised report of this nature eases the pressure on planning staff in South Lanarkshire when starting a new LDP. The emphasis that will be placed on the gate-check approval suggests that such arrangements should be adopted by all Scottish planning authorities.

Within Scotland, this approach is not unique to South Lanarkshire. As part of the ongoing work to transpose the Planning (Scotland) Act 2019 into new LDP practice, Moray Council was asked by a Scottish Government steering group to draft a pilot evidence report for the preparation of its 2020 Development Plan (Moray Council, 2018). The chapter in the pilot evidence report dealing with environmental issues draws on a 2017 SoE report produced by Moray Council "to identify current and potential pressures that need to be considered and addressed within the LDP" (p.28). Moray's pilot evidence report observes that its 2017 SoE report "provides a review of the baseline resource and analysis of the health of the environmental

assets in Moray focusing on the water environment, biodiversity, landscape, cultural heritage and communities and infrastructure. The key issues are similar to those identified in the SEA Scoping Report” (*ibid.*).

There are numerous examples of planning authorities in other jurisdictions that draft regularly updated SoE reports or their equivalent for their area. International examples are provided by e.g. Germany, where landscape and environmental plans (*Landschaftspläne*) are prepared next to and usually before development plans are devised (Hanusch and Fischer, 2011; Stadt Esslingen, 2018) at local as well as at regional levels. Furthermore, in the Netherlands, environmental plans (*milieuplanen*; Provincie Utrecht, 2015), along with environmental policy plans (*milieubeleidsplanen*) and nature visions (*naturvisies*) play important roles, in particular with regards to informing other (development) plans. There are also countries where national and regional environment reports are prepared, some of which are focused on specific areas of environmental importance, including e.g. Canada, where this is more ad-hoc (regional environmental studies; Great Sand Hills Advisory Committee, 2007) and New Zealand, where it is very systematic (Ministry for the Environment New Zealand, 2015).

The current arrangements for producing SoE reports by SPAs are voluntary. No planning circular or existing SEA Guidance includes such a requirement. When introduced, the new system for preparing LDPs should make the production and regular updating of a SoE report a requirement designed to facilitate compilation of the evidence-base at the outset of preparing new LDPs, possibly within the overall context of a pre-plan SEA. Requiring all SPAs to produce and regularly update an SoE report for their own area would ensure that much of the information needed to create an environmental baseline for the evidence-base at the start of preparing a new LDP was already available, obviating extra demands on both the team managing the LDP exercise within the SPA and the staff of the CAs responding to such demands.

The introduction of a requirement for SoE reports would facilitate the wider goal of ensuring that local development plans contribute appropriately to the delivery of the important environmental objectives and targets that we outline in section 3.1 above. Moreover, a closer alignment between plan-making and the delivery of environmental goals could be expected to drive better proportionality i.e. refinement and improvement of the type of data to be collected, to focus more closely on information necessary for assessing progress against key objectives or mediating between strategy choices; and move away from the collation of extraneous information, with tenuous relevance to assessment plan-performance. Greater goal and target-focus may also foster greater standardisation in SoE reporting format, which would facilitate cross-SPA comparison and better monitoring over time and space.

Our proposals for establishing a requirement for a regularly updated SoE report in each SPA could also provide a platform for initiating better public engagement both prior to the preparation of new LDPs and from the beginning of the preparation process (possibly within pre-plan SEA), an aspect of planning reform also highlighted by the Scottish Government (2017a). Production and updating of the SoE report could involve establishing an advisory working group drawn from other public agencies, community groups, NGOs and members of the public from the local area, which would serve as the SoE report's local consultation body, being asked to monitor and comment on each updated version of the SoE report. Establishing such a local consultation body would also help ensure that the creation of an environmental baseline in the initial evidence-base stage of preparation of a new LDP offered ample opportunity for such a body to engage with the LDP from the start, having already become familiar with the process of setting out such information in the production and regular updating of its SoE report. In the absence of an informed public group of this kind, the evidence-base and gate-check stages of preparing a new LDP may encounter difficulty in engendering much local public engagement. The establishment of such local bodies could be included in the planning circular and/or revised SEA Guidance.

To formalise this aspect of preparing new LDPs, in addition to making this a requirement through a new planning circular, the revised SEA Guidance Manual should be extended to include the preparation of a regularly updated SoE Report *in advance* of initiating any new LDP; again, possibly within the context of a pre-plan SEA. The coverage of the SEA Gateway itself should be widened to include the production of such SoE reports, and requests to CAs for their help in updating SoE reports should be included as part of the normal ongoing correspondence between SPAs and CAs channelled through its facilities. In this way, a more efficient use of staff resources would result, with what would otherwise be the peaks and troughs of demands for information and advice placed on CAs at the outset of any new LDP smoothed into a continuous process of engagement in maintaining an up-to-date set of SoE reports across all SPAs.

### 3.3.4 *Improving delivery through digital platforms*

Both the SPAs and the CAs that assist them in applying SEA to their LDPs face increasing pressures on their budgets and their staffing resources. We recognise that implementing our recommendations with regard to SoE reports and SEA Advisory and Evaluation Teams (see above) would place additional responsibilities on some staff during the process of applying their expertise and skills to deliver more effective systems for embedding the environment into the LDP process. However, there are new facilities in the pipeline for coping with these additional demands, effective use of which should lessen the pressures on staffing and budgets.

The Scottish Government has just launched its 'digital strategy for planning' (Transforming Places Together – Scotland's Digital Strategy for Planning). This draws on current work to offer a new digital platform intended to expand existing digital coverage to national, strategic and local planning activities. The aim is to deliver efficient, consistent and transparent facilities, covering all aspects of the planning process and improving information flows in these areas. If the system proves effective, it offers the means for delivering some of the environmental aims of the new process for preparing Scottish LDPs.

The following suggestions for enhancing current practice through the introduction of a digital platform are worth pursuing:

- to facilitate the compilation and maintenance of updated SoE reports by SPAs for their authorities, enabling more rapid construction of environmental baselines (possibly within the context of pre-plan SEA) in preparing the initial evidence-base to start new LDPs;
- to provide improved means for promoting community engagement at the gatecheck examination, as well as ensuring that CAs are better placed to oversee and comment on the environmental aspects of the evidence-base at this examination;
- to offer a way of replacing the detailed examination of specific proposals entailing exchanges between SPAs and CAs that is current focused on the soon to be abandoned Main Issues Report (MIR) stage, by allowing an efficient means for CAs and other interested parties, including stakeholders as well as the general public, the opportunity to make their voices heard;
- to help promote the aims of our proposal for *SEA Advisory and Evaluation Teams*, as detailed in Section 3.3.2 above, by co-ordinating the efforts of CAs appointed to oversee progress in preparing individual LDPs, and smoothing their communications with SPAs in this respect;
- to create a flexible platform for maintaining and updating an LDP after its adoption, allowing the ten-year horizon to be introduced in the expectation that the digital platform would embrace ongoing changes as required, meeting the expressed desire by CAs to promote the concept of integrated SEA/planning preparation and subsequent management.

Digital platforms do not always deliver all their anticipated aims. However, the provision of such a facility, if it met its targets, would improve delivery, economising on both staff resources and departmental budgets while supporting many of the processes required to help embed the environment into LDPs.



### 3.4 Monitoring

Monitoring has long been recognised as the Cinderella of assessment regimes. We add our voices to the calls for monitoring of the environmental effects of plans to be improved, arguing furthermore that the task of embedding the environment into plan-making, and the 2019 Act reforms, amplifies the case for doing so. With local development plans to have a ten-year life between major reviews, then effective monitoring is vital to ensure that subsequent plans can build on what is learned, to inform their successors. It is also important, given the argument that we make above, that plans should be linked to the delivery of environmental goals and targets, many of which have pressing time frames. Effective monitoring would also serve the credibility and legitimacy of SEA, by alerting governments at all level to the environmental benefits created and costs avoided by embedding environmental goals in plan formulation, and avoiding damaging choices (Therivel and González, 2020).

As Hugh Ellis of the TCPA remarked, SEA (along with EIA) has “become the environmental brain of the planning system. Although that brain could be improved, it’s critical to the system” (in Early, 2020). We concur, but would also observe that SEA plan-monitoring is often depicted solely as a feedback loop *within* a plan-making cycle. We argue that it should be repositioned as a learning process of wider importance within Scotland’s environmental governance machinery, for four key reasons.

First, better monitoring would improve the wider capacity for learning, enabling the planning system and other areas of policy to become less linear and more ‘adaptive’ (Holling, 1978; Jones and Greig, 1985), in that they facilitate adjustment in the light of new knowledge. Learning from the impacts of plans can form part of the ongoing ‘search for intelligible solutions’ (Weale, 1992, p.222) to our problems, not just of relevance to planning but to other policy sectors. Just as environmental targets should be shared across government, with planning structured to make a greater contribution, so too should the lesson-drawing from the monitoring processes. This aligns with our wider points above, on collaboration in the production of SoE reports and shared digital platforms.

Secondly, better monitoring would redress the tendency to place ‘blind faith in mitigation’ (McLauchlan and João, 2011b, p.3), without evidence to check whether measures were (a) implemented or (b) successful. Our early argument to institute greater goal-direction into plan-making and SEA should also deliver a clearer framework for defining appropriate mitigation, and for monitoring of delivery. This, in turn, ought to provide a clearer framework for scoping EIA when individual plan developments come forward, and a delivery system for mitigation needs to be set up.

Thirdly, insights on the efficacy of various mitigation measures may be relevant beyond land use planning. Other policy areas may wish to learn how best to deliver environmental enhancement and institute meaningful and multi-functional green infrastructure. It is also partly because, as we noted above, some of the most effective ways of making development environmentally acceptable – by providing suitable mitigation and environmental enhancements, - may not lie wholly within the planning domain, but require reinforced linkages with the targeted deployment of agri-environmental, forestry or coastal management measures. The scope for sharing data-sets between SoEs for planning authorities and other Scottish environmental monitoring and reporting regimes should also be explored (this is already a component of ongoing consultation on Environmental Principles and Governance in Scotland).

Fourthly and finally, effective monitoring of planning outcomes would also be of service to the whole enterprise of embedding the environment into public policy. Although, aspirations for ‘better integration’ are frequently asserted, they remain among our most poorly evidenced governance endeavours in the environmental field (Jordan and Lenschow, 2010). More effective monitoring of SEA in the context of the planning system would thus be of significant wider service.

#### **4. Conclusions**

The goal of our think piece was to generate ideas for how we might better integrate environmental concerns into Scottish local development plans through SEA. While we have been alert to changes unfolding in the Scottish planning context, we have been guided by what we think will work – i.e. what would be required to embed the environment into plan-making, to achieve meaningful integration. This has generated ideas that respond directly to imminent changes in the Scottish planning system, but others that provide more of a benchmark against which the direction of travel can be judged.

In short, it is our argument that for the environment to be embedding in local plan-making, this needs adjustment to the core goals of planning, and achieving this is likely to require ‘front-loading’ action from higher tiers – government, the emergent NPF4 – to institutionalise firm, concrete and suitably measurable objectives into the system. The aim is to move from a planning system that is suffused with often broad and ambiguous environmental goals that must be ‘taken into account’, to a position where delivering on environmental goals has parity of esteem with, and comparable levels of non-negotiability to, core development and infrastructural goals. But integration is not a one-off exercise. To keep environmental concerns embedded requires actions – processes and people – that can keep the environmental effects of plan-making firmly in focus throughout. Here the framework and processual nature

of SEA can help, but we have suggested ways that its efficacy can be enhanced in the service of environmental goal delivery.

In making our arguments, we acknowledge that there are themes to which we could have given more attention. One of the factors that often compromise the weight given to SEA as a tool for driving the environmental improvement of plans is the relatively low public visibility of the process (Bina, 2008). Many of the steps we have suggested – the public interface of SoE reports, digitalisation and better visualisation, thinking carefully about the early plan – would help in raising a public profile for SEA; but so too would greater integration between plan-making and high-profile environmental goals that better convey what is at stake in plan-making.

There are of course some counter-arguments and caveats to our arguments. Some might criticise our suggestions for being normative, for taking a value position that assumes *a priori* that environmental issues should be given greater weight in the planning balance. Guilty as charged, but the status quo is no less value-laden, in its explicit and tacit assumptions that environmental quality can be traded-off, substituted for economic benefits, easily mitigated or are deferred for some hypothetical future consideration. Moreover, much of our argument is simply that the planning system should be geared to take a bigger role in achieving objectives and standards that Scottish Government has already set.

Some might observe that our ideas replicate for the environment aspects of the deliver machinery that gives development goals – for housing, or infrastructure – their pre-eminence in the planning system. Indeed. In thinking through the kind of institutional arrangements which would embed the environment as a goal of core significance in plan-making, one should not be surprised that our ideas echo the mechanisms that give developmental goals their privileged position. Although we have not had the space to discuss it here it would, of course, also greatly assist the goals of aligning planning with environmental goal delivery if priorities for infrastructure – their form, capacity, location and necessity – were given very careful scrutiny for their compatibility with environmental goals. To do otherwise is to leave local plans dealing with environmental problems at ‘the end of the pipe’ – the opposite of meaningful integration.

The final counter-argument that we consider is the claim that setting firm, tough environmental targets raises the almost inevitable likelihood of failure. We acknowledge that trying to steer change is always challenging, and often falls short in the face of the complexities, uncertainties and resistances of modern social life. Equally, the effects of planning actions on many aspects of environmental change are complex, indirect, and hard to predict. Nevertheless, at least with the objectives-led approach that we suggest society can gauge how well planning is performing against environmental standards that matter, and possibly trigger improvements – in

understanding and also in policies - which one cannot if environmental goals are viewed flexibly and as semi-detached from the start.

The prize is that planning might move from being a policy sector shaped by objectives for development, to a centre stage position within Scotland's new, post-Brexit system of environmental protection. This is a position in which local development plans, supported by SEA, form a key arena for delivering environmental goals and for grounded learning, more fitting for the environmental challenges of our time.

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### Annex 1: Matrix for an initial assessment of developing sites

category	Aspect		Criteria	Ranking			
				Negative	Unclear	Positive	
Suitability	Potential Impacts	Environment and Health	Air	Will development be associated with any improvement of air quality?			
			Biodiversity	Will development be associated with any biodiversity net gain?			
			Water	Will development be associated with any improvement of groundwater recharge and / or surface water quality?			
			Flood Risk	Will development be associated with any reduction of flood risk?			
			Hazard/nuisance	Will development be associated with any hazards/nuisances?			
			Contaminated land	Will development remedy a brownfield site and/or contaminated land site			
		Social	Mobility/accessibility	Will development require an extension of the existing transport network?			
			Equity	Will development come with a mix of affordable housing?			
			Public services	Will development improve public services (education, health) & community facilities?			
			Community Facilities	Will development lead to an improvement of existing services?			
	Policy Restrictions	Environmental	Historic sites	Are effects likely on historical/archaeological sites			
			Climate Change	Is site development compatible with climate change adaptation and mitigation?			
			Waste management	Is site development compatible with waste management plans / programmes?			
			Designated Conservation Areas	Is the site within or in proximity to designated conservation areas? E.g. SSSI, Ramsar			
		Green Belt	Will development be in designated Green Belt land or could it impact on it?				



		Social	Listed buildings	Are listed buildings present on the site?			
			Heritage	Does the site include any other aspects of cultural heritage?			
			Economy/employment	Is development of the site compatible with economic/employment policies?			
Achievability	Delivery factors	Compatibility	Are there conflicts of development with other strategies, policies, plans & programmes?				
		Necessary Infrastructure	Is necessary supporting infrastructure in place?				
	Cost factors	site preparation costs	Are potential costs for preparing the site for development reasonable?				
		exceptional works costs	Are costs of improving existing supporting infrastructure to ensure sustainability of new development reasonable? <i>e.g. sewage, water treatment, transport</i>				
Availability	Site Ownership		Does the site have documented legal owners?				
			Are there any legal barriers to development of the site?				
	Previous SPPPs		Has the site been included in previous strategies/ policies / plans / programmes?				
	Planning History		Is the planning history of the site clear with reference to e.g. existing listed buildings, designated sites or planning permissions?				
		Is the site affected by any existing strategies/ policies / plans / programmes?					

**Annex 2: Linking siting assessment to environmental goals**

Aspect		Criteria	Impact on Goals/Targets		
			Negatively (no scope for effective mitigation)	Neutral/positive with effective mitigation	Positively
Potential Impacts	Environment and Health	Air	How will developing the site affect air quality?		
		Biodiversity	How will developing the site affect biodiversity?		
		Water	How will developing the site affect surface water quality?		
		Flood Risk	How will developing the site affect flood risk?		
		Climate Change	How will developing the site affect Net Zero goals?		
		Contaminated land	How will developing the site affect the quantity of brownfield or contaminated land?		



## Author biographies

**Richard Cowell** is Professor of Environmental Planning at Cardiff University. He has thirty years' experience of researching the relationship between planning and sustainable development, with particular interest in the dynamics of integrating environmental concerns into decision-making, and the environmental opportunities and consequences of planning reform. He has applied his expertise to environmental assessment techniques and concepts (e.g. natural capital-based concepts of sustainability, ecological footprinting and green infrastructure). Since 2015, Richard has been researching the implications of Brexit for UK environmental policy and the interface with planning. As well as his substantive expertise, Richard has extensive experience in the design and conducting of interviews and focus groups, and in providing advice to government and professional organisations.

**Professor Thomas Fischer** has thirty years' experience of working and researching on the design and efficacy of systems of EIA, SEA and other forms of appraisal, in the UK and other countries. In particular, he has conducted critical analyses of the performance of SEA and EIA in the UK planning system, including an assessment of the most recent revisions to the EU EIA Directives. He also has a tracked record of engaging with debates about the complex effects of impact assessment (IA) systems, and thinking creatively about their reform and extension. In this context, based on observation and empirical evidence he has critiqued IA instruments in various European (UK, the Netherlands, Germany, Sweden, Finland and Italy) as well as non-European countries (Canada, US, Brazil, China, Japan, South Korea, India, Pakistan, Australia). He is a Fellow of the Institute of Environmental Management and Assessment (FIEMA) and editor-in-chief of Impact Assessment and Project Appraisal, the journal of the International Association for Impact Assessment (IAIA). Furthermore, he has been a member of various related working groups, panels and advisory boards, including e.g. for the SPEAK (Sustainable Planning and Environmental Assessment Knowledge) project, funded by the Swedish Environment Agency (2015 -2018).

**Tony Jackson** has thirty years' experience of teaching and researching the relationship between spatial planning and environmental protection. He has undertaken extensive theoretical and applied research into the impact of Scottish SEA legislation, and a series of studies comparing the Scottish approach to this technique with those in other comparable administrations, such as Canada, USA, Australia, New Zealand and EU nations. Professor Jackson has also conducted theoretical and applied research into the performance of the Scottish planning system in respect of environmental parameters, covering climate change legislation, environmental justice, industrial ecology, waste recycling, environmental assessment and taxation, plus other aspects of sustainable development, undertaking fieldwork



at Scottish and local planning authority levels, and comparing these findings with fieldwork on planning systems in Canada, Australia and New Zealand.