***environmental SCIENTIST* journal: learning resource notes**

The purpose of these educational resource notes is to provide a format for informal, seminar-style discussions of the topics explored in the latest edition of the journal of the Institution of Environmental Sciences.

Through discussion of the ideas and issues presented within the journal, they aim to supplement and enhance students’ knowledge and understanding of a broad range of environmental science issues and provide insights into the professional concerns of practising environmental scientists.

**Articles in focus**

The below articles have been selected as particularly relevant for in-depth discussion, allowing for wider debate of the key elements of the article topic. Some specific questions you may wish to consider when reading and discussing these articles are outlined.

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| Learning outcomes | * Understand the main ideas discussed in the publication
* Describe the main conclusions and their relevance to the environmental science sector
* Critically reflect on the main concepts discussed
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| Format | * Articles of particular interest are to be selected and shared with the group to read ahead of the discussion. Suggestions of focus articles are attached here
* Small group discussions of articles that closely relate to programme content to supplement learning
* Discussions can be led by participants or the tutor, using the ‘articles in focus’ resource to prompt debate and aid the conversation
* The suggested discussion points and questions provided in this pack for selected articles can be used as a starting point to guide the discussion
* Students can be encouraged to choose to discuss any of the other articles within the issue
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e*nvironmental SCIENTIST*
**Planning a route to sustainable transport**
Vol 31, Issue 1

<https://www.the-ies.org/resources/planning-route-sustainable>

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| **Topic overview**  | In the UK, transport became the largest sectoral emitter of greenhouse gases in 2016, growing to account for 27 per cent of national emissions by 2019. This edition of the journal examines the need for and some of the components of a sustainable and decarbonised transport future and how they may work together. Read about vehicle and fuel options, the opportunities presented by 15-minute cities, how we can enable sustainable consumer behaviour change, air quality and health co-benefits of sustainable transport, a case study of the Solent future transport zone, and more. |
| **Articles in focus** |
| **Walking and wheeling: the best route to true 15-minute living?****Mark Philpotts and Chris Fallen, (p.8)** | **Article overview:** This article looks at how more local, active travel might be achieved. |
| * Which groups’ thoughts, regarding city design, should urban planners consider when aiming to create effective cities for active travel?
* What are some potential barriers to the 15-minute city? Picking one of these, how might it be overcome?
* Thinking of a place you know of where cycling and walking is actively encouraged by the area’s design, what might be the challenges of applying this elsewhere?
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| **Best practice in mitigating shifting environmental problems****Craig Love (p.35)** | **Article overview:** This article considers how engineering and natural solutions can work together to combat climate change. |
| * Why might finding nature-based and engineering solutions become more important in the future?
* When we think about nature-based solutions, many of us will first consider tree planting. Can you think of how such a solution might be deployed in a marine or freshwater environment?
* What is your view on carbon offsetting? Does it represent effective climate action as a standalone approach, and why?
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| **How can sustainable transport benefit air quality and health?****Sam Pollard (p.50)** | **Article overview:** This article analyses the links between sustainable transport, air quality and health.  |
| * How can transport systems better cater to and improve health for all of society when different groups have such different needs?
* Thinking about mechanisms such as congestion charges, which are designed to deter polluting transport, how might policymakers better encourage zero-emission behaviours without using monetary incentives?
* In your opinion, is improving air quality the responsibility of authorities or individuals? Why do you think this?
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