

# SCOTTISH ENVIRONMENT PROTECTION AGENCY

Delivering One Planet Prosperity

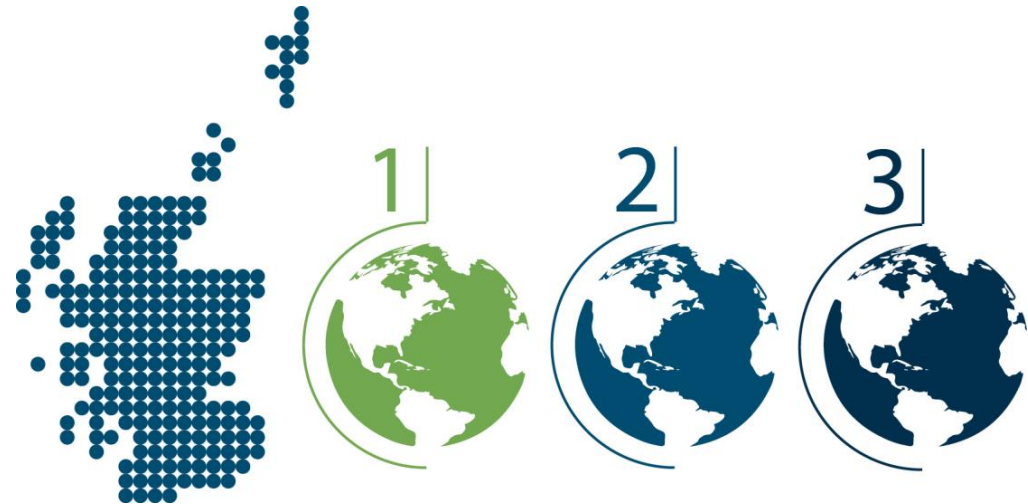
Circular Economy Conducive Places

Angela Burke and Ailie Callan  
Planning Service



## THE SCALE OF THE CHALLENGE

If everyone lived as we do in Scotland, we would need three planets to sustain ourselves. Businesses, societies and nations which will thrive in the 21st century are those which have developed ways to prosper within our environmental capacity.



**Resource scarcity issue?**



**Opportunity**

Abundance of materials and resources all around us  
*- we just need to look in different places -*



## Linear economy



Technical & biological materials mixed up

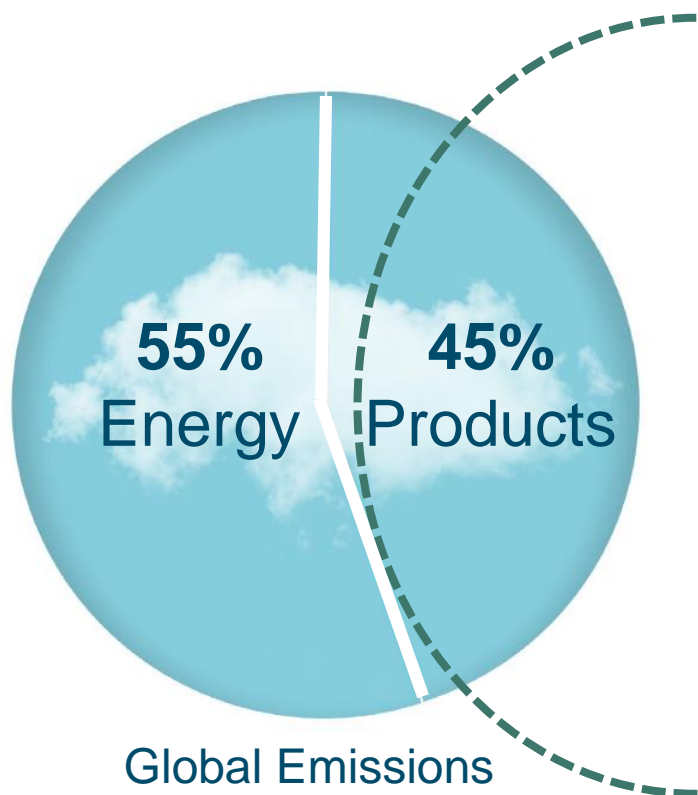
Energy from finite sources

## Circular economy



Energy from renewable sources

## How does the circular economy help tackle climate change?



### Design out waste and pollution

- **reduces** greenhouse gas **emissions**
- improves **health of natural systems**, increasing resilience to climate change



### Keep assets and materials in use

- retains **embodied energy** that went into their production
- flexible design allows us to **adapt** assets (buildings/places) over time to the physical effects of climate change



### Regenerate natural systems

- **sequesters carbon** in soil and vegetation
- **increases adaptation** to the physical effects of climate change

## To meet peoples needs within planetary limits our places need to transform



**Our buildings and places will be used differently  
new services & networks will be needed**

**Meet changing  
needs of people**  
– live, work & play

**Well connected**  
– for people and  
nature

**Healthy natural  
systems**  
-protected,  
regenerated &  
restored



**Designed to last**  
- flexible and  
adaptable

**Optimises use of  
resources**  
– land (built assets &  
space), water,  
materials, energy

**Make it easy for  
materials to move  
around and  
facilitates reuse**

# LAND AS PART OF THE CIRCULAR ECONOMY



Reform Scotland's regeneration strategy to focus on place-based regeneration and land reuse to empower communities.



The public sector to take an active role in development. Fixing up 'brownfield' sites should be a priority in the next national Infrastructure Investment Plan.

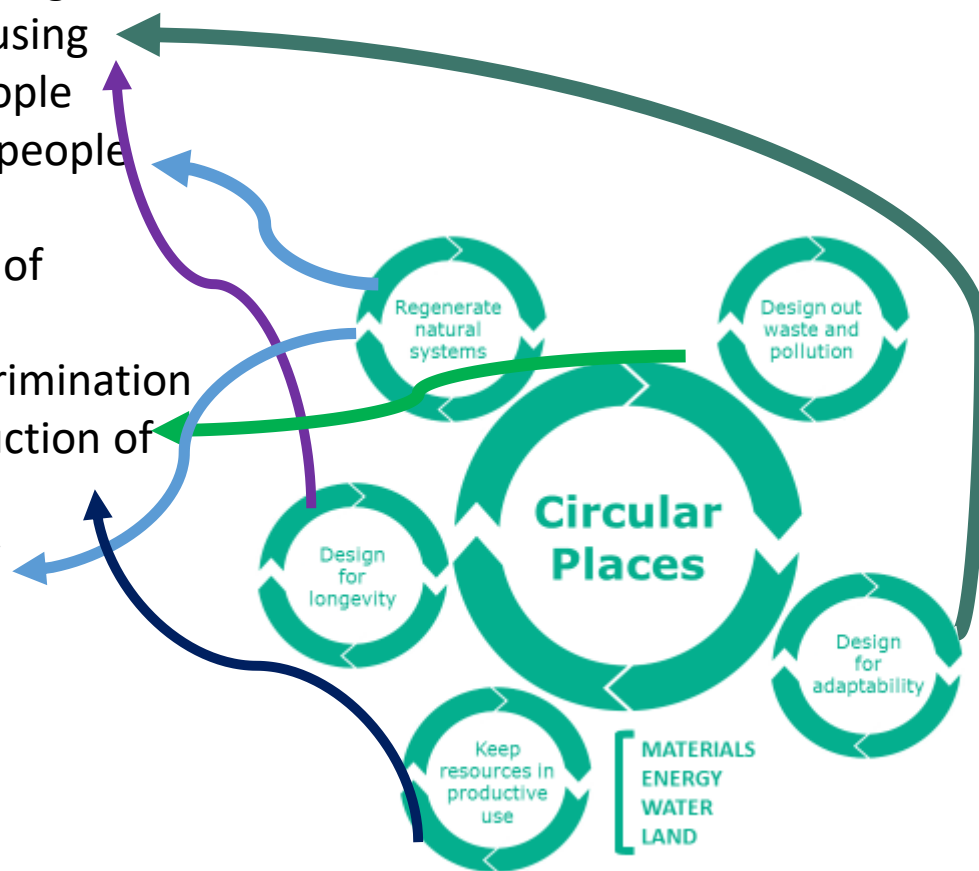
#notsoprettyvacant



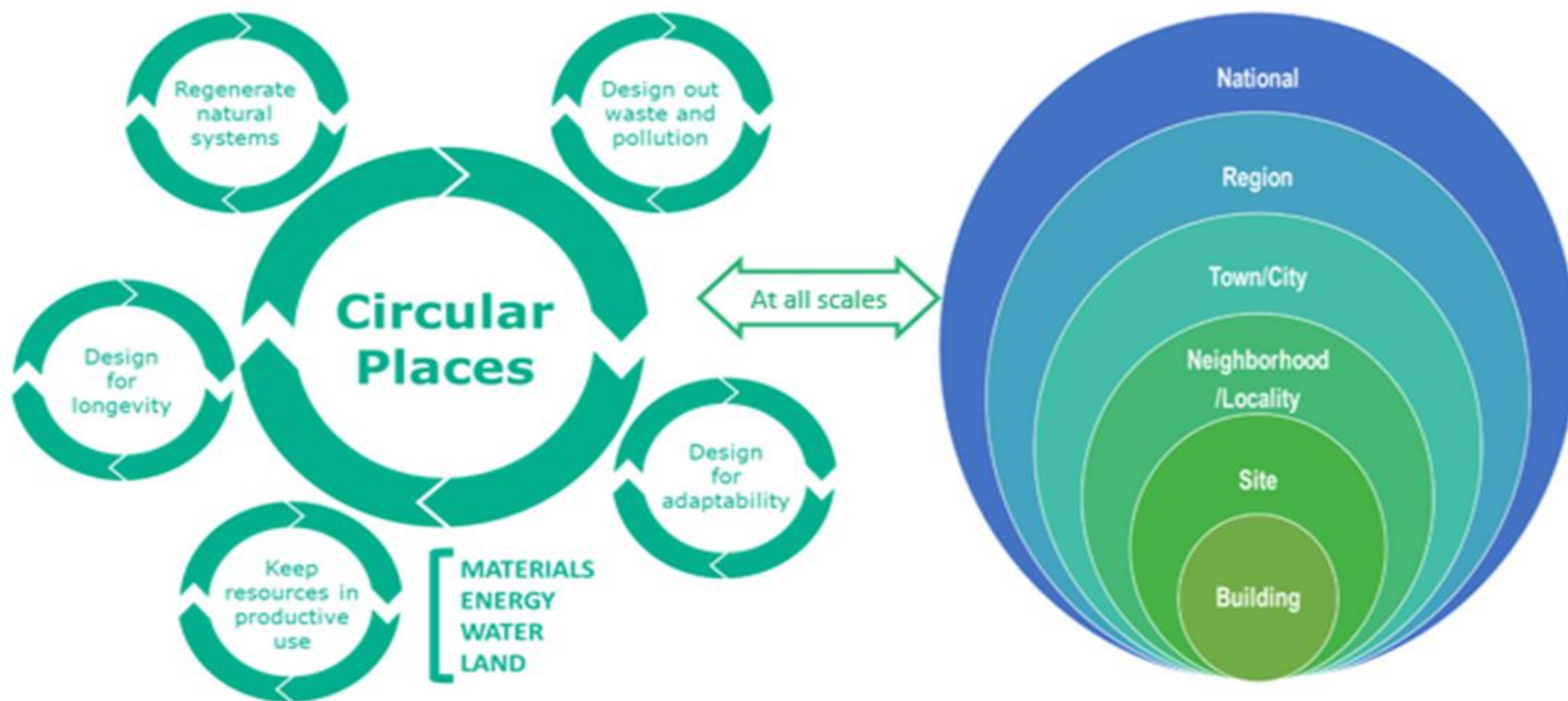
Easier to buy land for reuse. New laws for compulsory sales orders – making people sell land if unused, and a review of the current ways land is bought and sold by the public sector.

## NPF4 high level outcomes:

- Meeting the housing needs of people living in Scotland including, in particular, the housing needs for older people and disabled people
- Improving the health and well-being of people living in Scotland
- Increasing the population of rural areas of Scotland
- Improving equality and eliminating discrimination
- Meeting any targets relating to the reduction of emissions of greenhouse gases
- Securing positive effects for biodiversity









## Planning for Circular Places

### Reducing Resource Use

urban form and spatial structure are strongly related to resource use. Compact site development can:

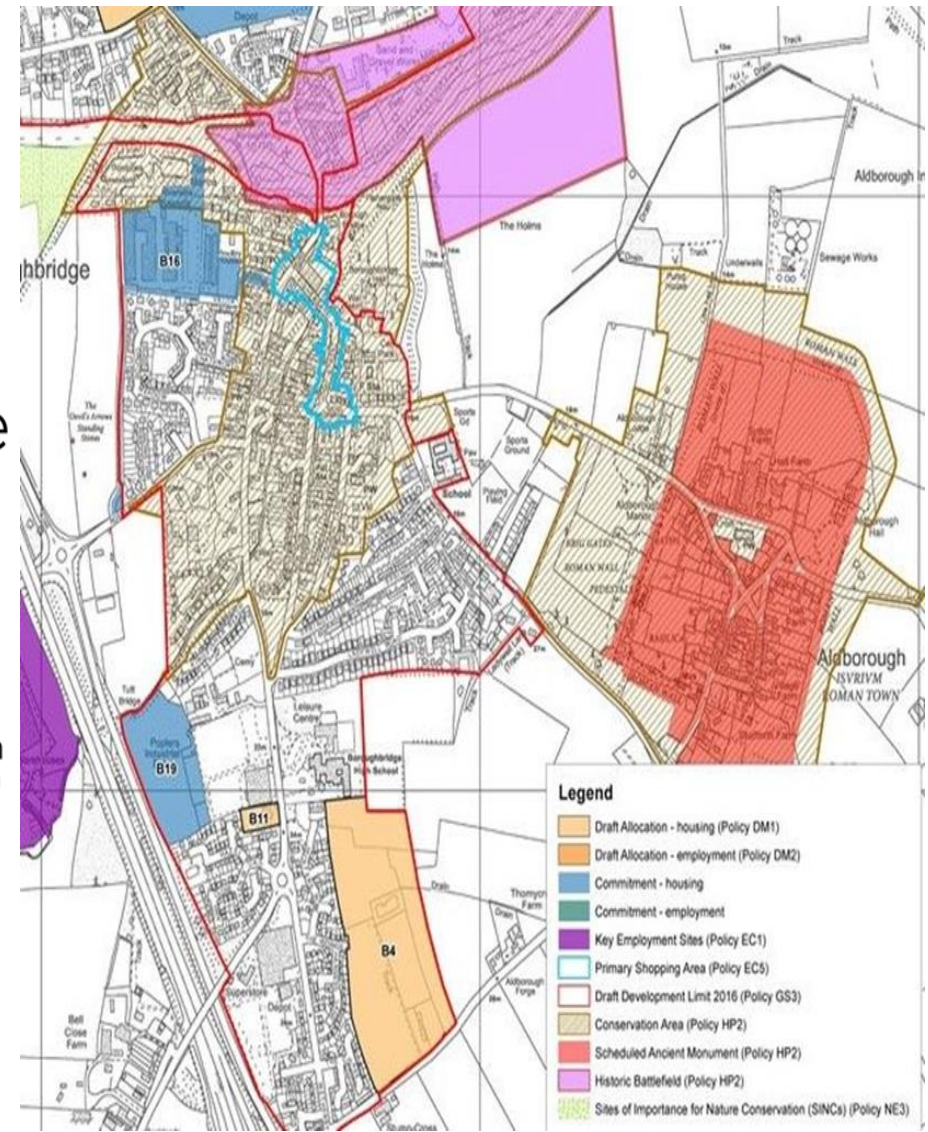


Reduce the (relative) need for new urban land

reduce energy use for transportation by reducing distances and encouraging use of public transport

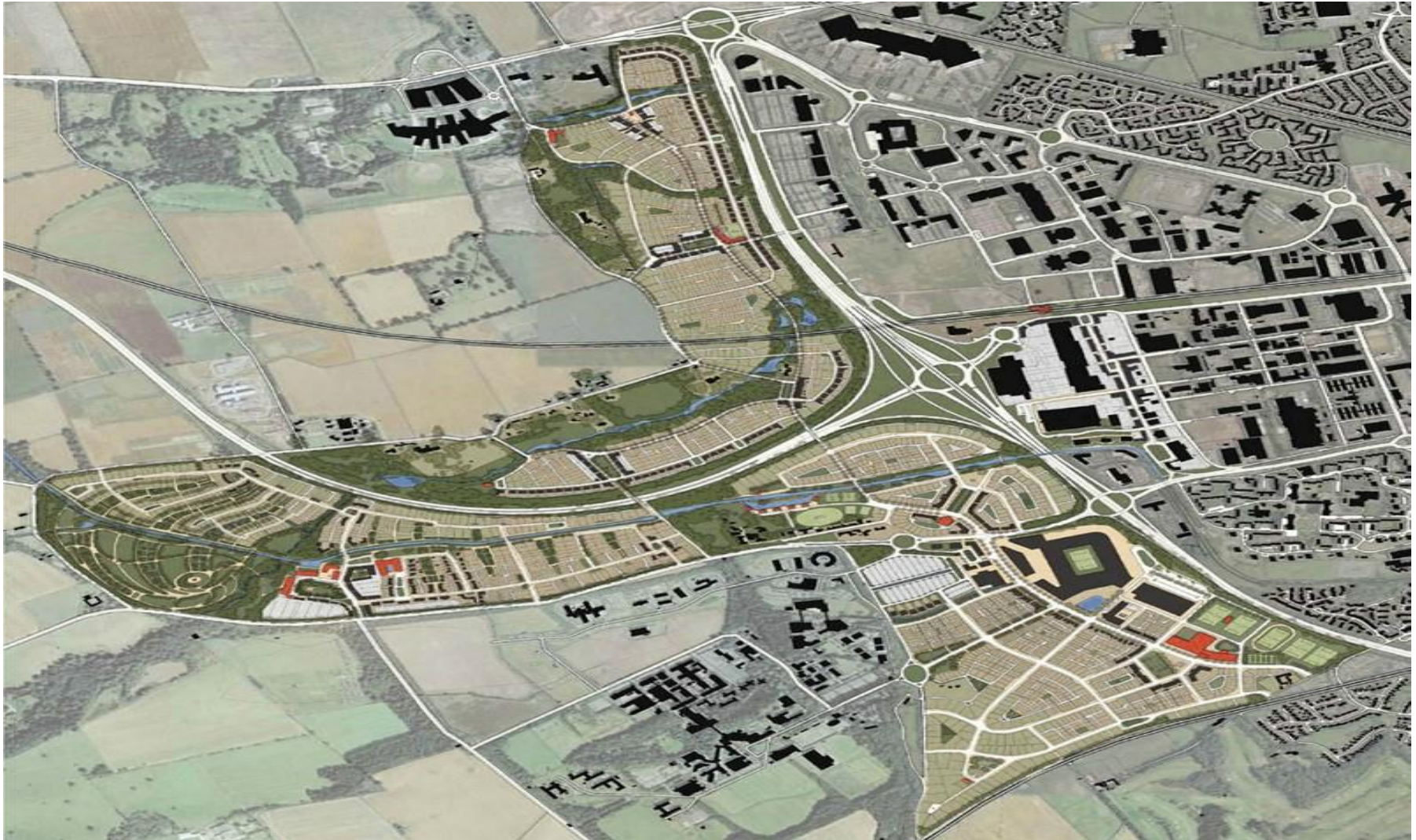


increase the efficiency of infrastructure and contribute to a reduction in resource consumption (eg in infrastructure construction)





Partners in Planning: working with Climate Change in mind  
**Circular economy conducive places**





Partners in Planning: working with Climate Change in mind  
**Circular economy conducive places**





## How SEPA can help?

### Embedding the circular economy into our work

- Incorporating circular economy principles into our sector plans
- Provide support and information across SEPA work that uses circular economy principles to deliver One Planet Prosperity
- Early engagement through planning service – refreshing our approach to be collaborative and place-based with focus on circular economy
- Sign-post information sources and help facilitate partnerships



## Contact details

[angela.burke@sepa.org.uk](mailto:angela.burke@sepa.org.uk)

[ailie.callan@sepa.org.uk](mailto:ailie.callan@sepa.org.uk)

[www.sepa.org.uk/planning.aspx](http://www.sepa.org.uk/planning.aspx)

 ScottishEnvironmentProtectionAgency

 ncy

ScottishEPA

