

Towards Low Carbon Communities: comparing councils in Scotland and the USA

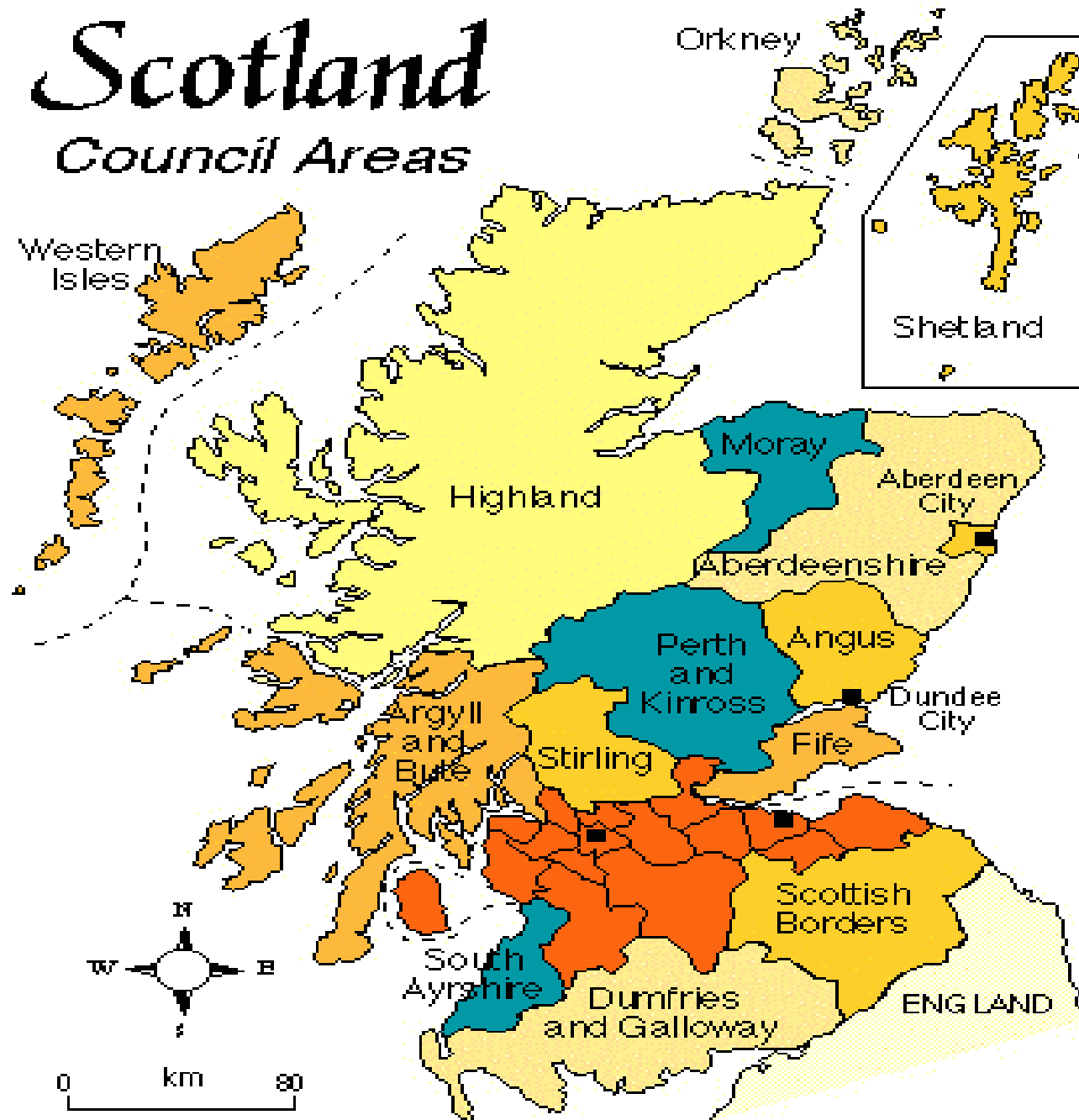
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Fishing from the same pool

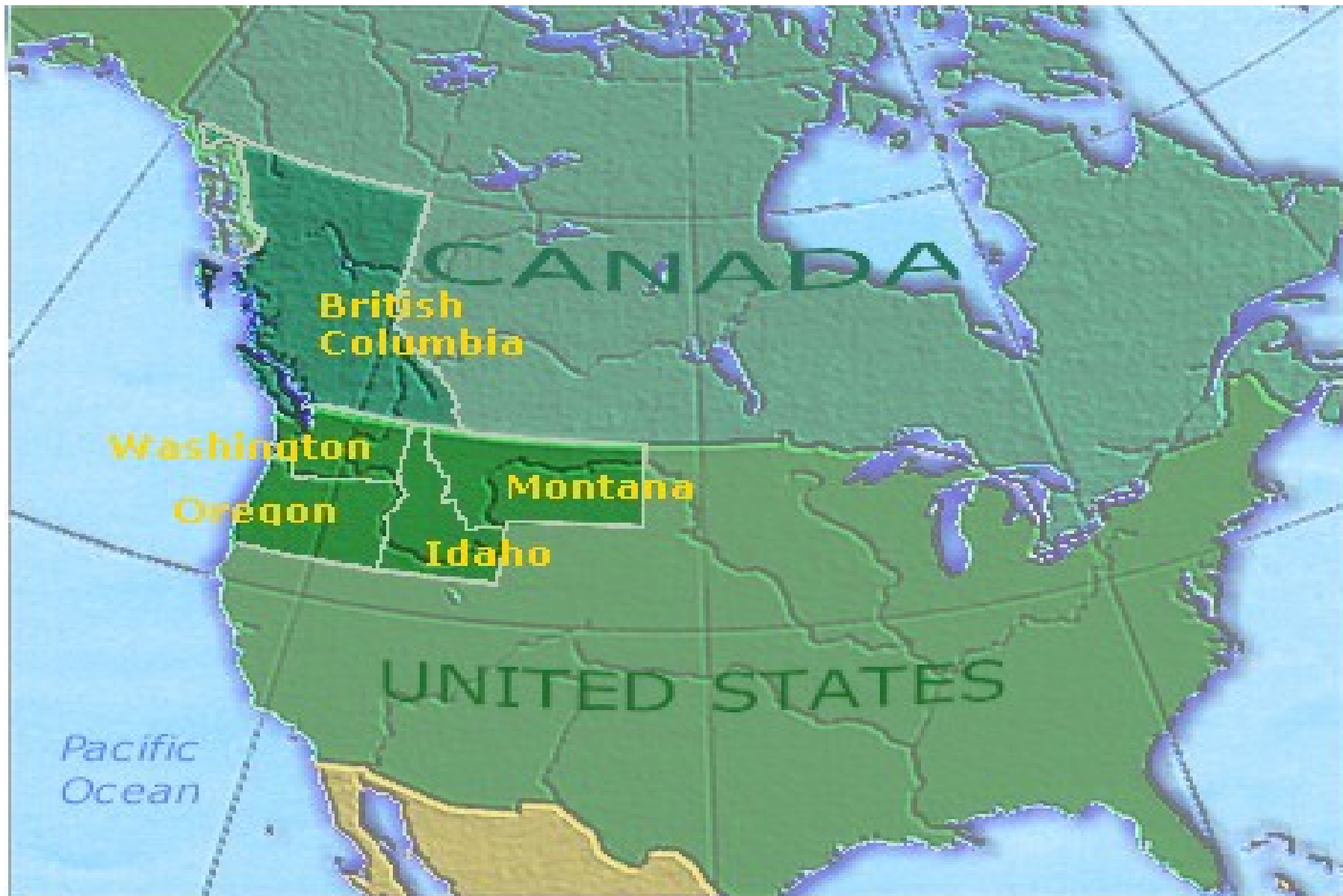
- Effective governance of local climate change actions is difficult because common property nature of atmosphere creates double-whammy:
 - **with no means of excluding non-participants, free-riders can share benefits without contributing to costs**
 - **if local actions raise local costs, people and jobs can move to lower-cost locations within a country and elsewhere: in this way carbon leakage will attenuate effects of local actions**
- How have local councils tackled this problem?
- Our research examines mitigation measures in Scotland and north-west USA

Scotland

Council Areas



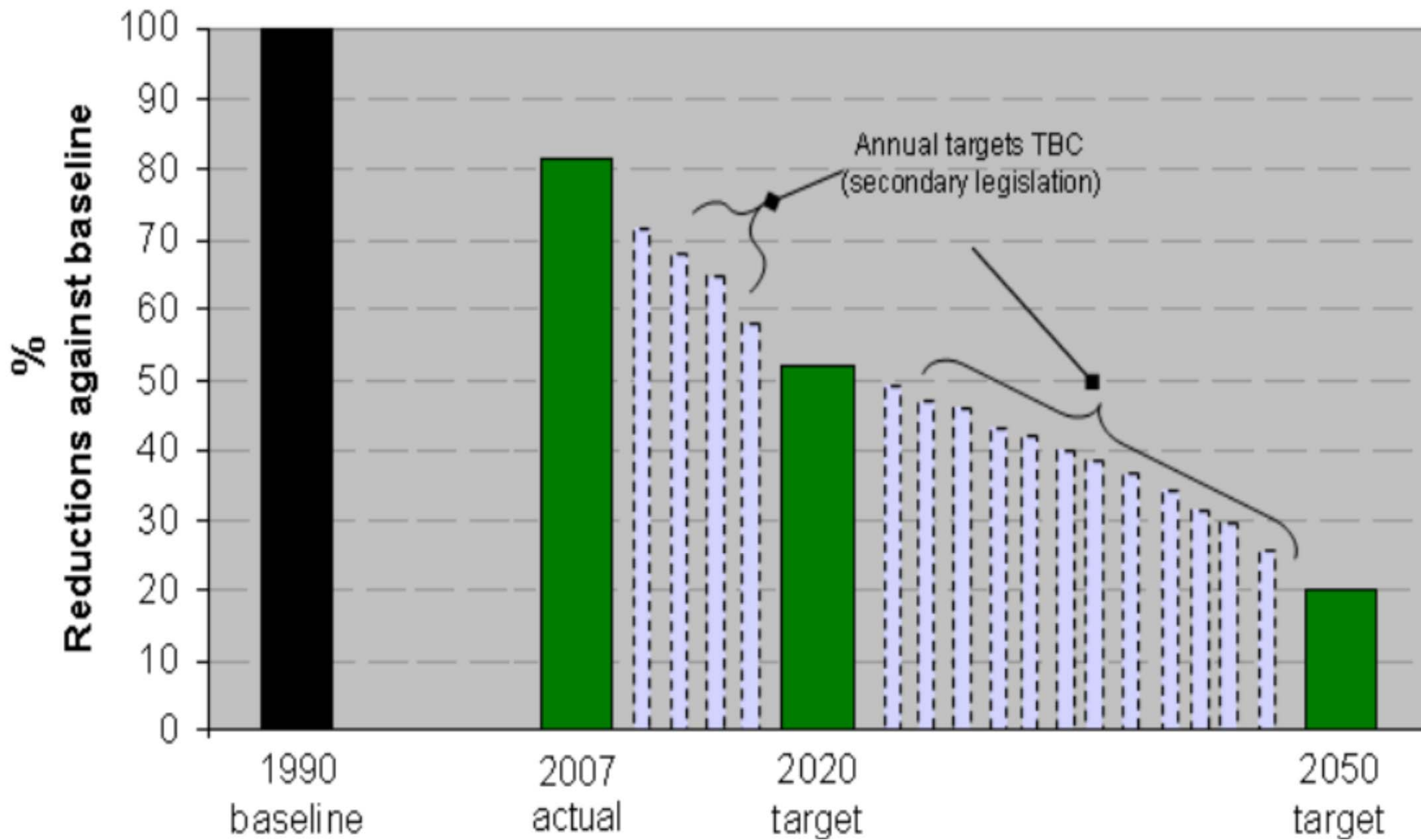
US Pacific Northwest



Dirigisme versus federalism in environmental governance

- Scotland adopts dirigiste, or centrally-directed, form of environmental governance:
 - **Climate Change (Scotland) Act 2009 tells local councils what their climate change duties are**
- US Constitution supports federal ‘dualism’, separation of powers between federal government and states, favouring multi-level environmental governance:
 - **unfunded federal mandates fiercely resisted by many States, part of reason why Congress has not enacted federal climate change legislation**

GHG emissions statutory reductions targets in Climate Change (Scotland) Act 2009



Bottom-up climate change governance: USA

- Without federal mandate to tackle climate change, US local climate change actions draw on multi-level mix of environmental governance, incorporating state legislation, local government ordinances, and voluntary initiatives such as
 - **International Council for Local Environmental Initiatives (ICLEI), as a Local Governments for Sustainability Initiative ‘Cities for Climate Protection’ (CCP)**
 - **US Conference of Mayors Climate Protection Agreement (CPA) sponsored by Pacific Northwest mayors at its 75th annual conference in Chicago in 2005**
- By 2009, of some 4,000 US municipalities, 606 US in CCP and more than 1,000 were in CPA

Uniform versus asymmetrical local climate change responses

- Uniform Scottish LA response reflects dirigiste top-down environmental governance & funding, with 80% of costs of LA services met by central government
- US municipalities rely mainly on local taxes, so why should individual councils pursue climate change actions when free-riders share in any benefits without sharing costs?
- US municipalities also risk 'carbon leakage' and loss of revenue by delivering climate change response through bottom-up multi-level asymmetrical environmental governance

What prompts US municipalities to adopt climate change measures without federal mandate?

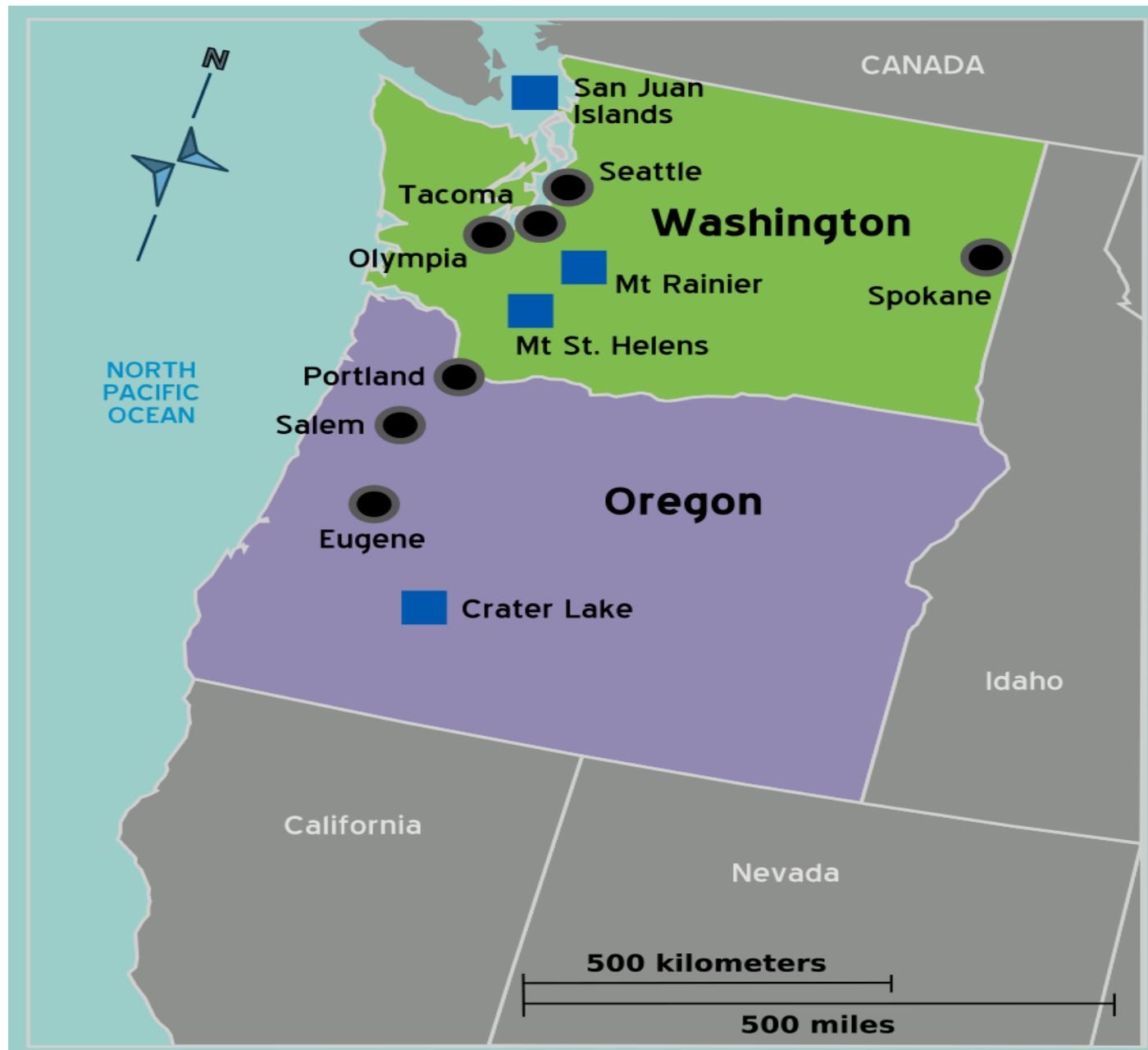
- **Research suggests:**
 - **State mandates facilitate local climate change actions, but many municipalities without state mandates also participate**
 - **External & internal characteristics influence take-up of such actions, with those municipalities in hazardous areas and with supportive communities favouring green policies more likely to participate: describes Pacific Northwest**
 - **Communities with reliance on high carbon activities less likely to participate (reflects implicit acknowledgement of carbon leakage)**
 - **Most adopters emphasise economic co-benefits of actions: can CCP strategy “lead to a meaningful local contribution to global efforts to mitigate climate change”, when “ICLEI officials emphasise the co-benefits of controlling local GHG emissions and often point to climate protection as a secondary consideration”? (Betsill, 2001: 402)**

Asymmetrical US responses and carbon leakage

- “the pitfall...of uneven performance by the various jurisdictions can have unintended consequences such as to encourage ‘shuffling’, whereby companies redirect their low-carbon products (such as hydro-electricity) to jurisdictions with stringent rules and high-carbon products (such as coal-based electricity) to areas with weaker or non-existent rules” Lutsey & Sperling (2008: 674)



Case studies: Portland, Oregon



Portland's pioneering status in climate change



- First US municipal climate change action plan (1993)
- Current plan emulates CCSA: 80% GHG reductions by 2050 with interim target of 40% fall by 2030
- Energy efficiency efforts started in 1980s to avoid reliance on imported high cost energy supplies
- Heavy stress on economic co-benefits of action plan

Portland's economic co-benefits of climate change actions

- 'Vision for 2050' sees:
 - “green jobs [as] a key component of the regional economy. Products and services related to clean energy, green building, sustainable food, green infrastructure, and waste use and recovery provid[e] living-wage jobs throughout the community, and Portland is North America’s hub for sustainable industry and clean technology” (CPMC, 2009: 16)
- Plan promotes Portland as sustainable economy:
 - “people live and do business in ways that are good for the economy, the environment, and for communities. The usual tradeoffs between growth, sustainability and equity are not necessary. Businesses are more efficient, innovative and competitive internationally. The local talent pool is deeper.” (CPMC, 2009: 17)

Case studies: Fife Council in Scotland



Fife Council is a leading green SLA

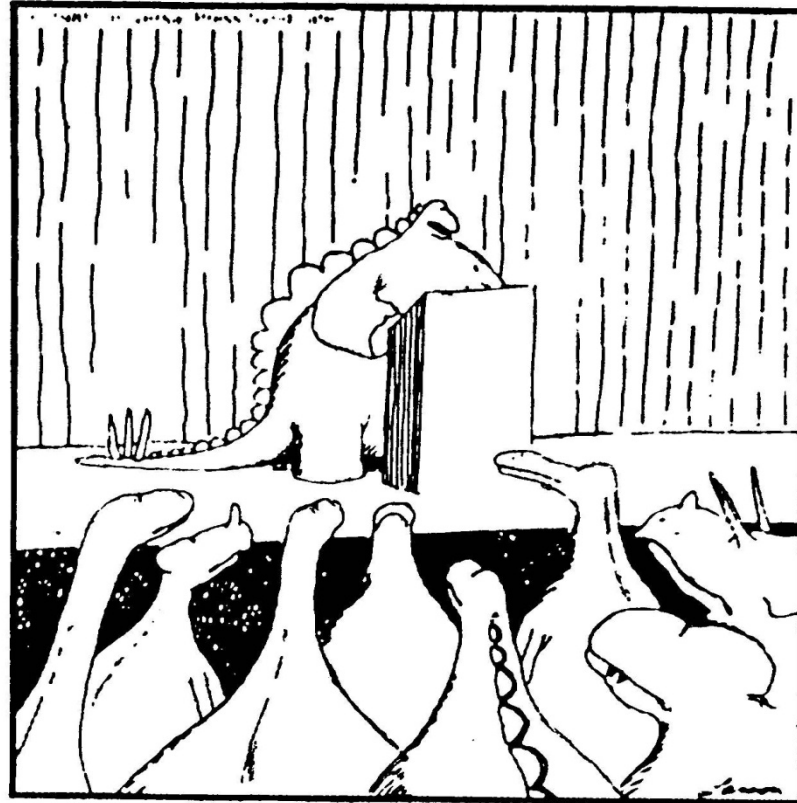


- Pioneered Scottish responses to LA21
- Early signatory of Scottish Climate Change Declaration
- Current Carbon Emissions Reduction Plan sets out council response to CCSA duties

Fife Council corporate energy efficiency plans

- Unlike Portland, not sold as local economic co-benefits of climate change actions, but as response to statutory duties from top-down environmental governance:
 - **Corporate energy efficiency amongst SLAs poor as revealed by EU Energy Performance Certificates: . “Over 70% of large public sector buildings have an EPC rating of E to G [poor to very poor], with only 4% rated at A or B [very good or excellent]” (Audit Scotland, 2010: para. 57)**
 - **New UK Carbon Reduction Commitment (CRC) Energy Efficiency Scheme to penalise inefficient corporate energy use**

Conclusions



"The picture's pretty bleak, gentlemen... The world's climates are changing, the mammals are taking over, and we all have a brain about the size of a walnut."

Bottom-up actions

- US municipalities have created bottom-up climate change governance to compensate for absence of federal mandate
- Many US local action plans focus on harvesting low hanging fruit, with participating municipalities justifying actions in terms of economic co-benefits and cost savings
- Even amongst most committed US municipalities, outcomes so far fall well short of major reductions in emissions being sought
- Also fail to address free-rider and carbon leakage problems of asymmetric bottom up responses

Top-down actions

- Scottish LAs focus solely on ways of delivering stringent reductions in GHG emissions demanded by top-down legislation: no attempt to sell such measures as benefitting local economy
- Competitive implications of free-riding & carbon leakage left to UK politicians to resolve at international level: dirigiste approach removes these concerns from local government, since all UK councils not only fishing from same pool but also using same tackle to do so
- Under this model of environmental governance, effective local climate change actions depend on principal-agent arrangements: funding systems must incentivise SLAs to discharge their CCSA duties, and deliver low-cost solutions that encourage others to emulate actions

Implications of asymmetrical action

- Asymmetrical local climate change actions amongst US municipalities threaten to separate US market into areas in which green activities encouraged as against areas in which brown activities sanctioned
- Permitting emergence of this asymmetric effect will simultaneously undermine productivity of US economy and lessen impact of local efforts to reduce GHG emissions
- Sufficiently worrying possibilities to warrant adequately funded federal environmental mandates to address climate change, applying top-down model of environmental governance for addressing this issue.