

# Climate Informed Planning and Design

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## **Purpose**

- Implementation of key recommendation of Mahon Tribunal to strengthen independent oversight of the planning process through:
- ► (1) Assessment of statutory plans of local govt system for fit with statutory (Government/EU) policy and legislative requirements;
- (2) Reviews and examinations of local authority and Bord Pleanála <u>systems</u> and <u>procedures</u> in the delivery of planning services to the public; and
- ▶ (3) Building <u>knowledge and information base in planning</u> through training for LA members and staff, public information, research.

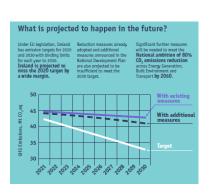


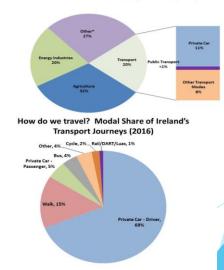
#### **Plans**

- OPR will evaluate local authority/regional assembly plans at strategic level:
  - Pre-plan making stage; (issues papers)
  - Draft plan/amended draft stages.
- ► Focus on climate change, consistency with National Planning Framework (Brownfield Targets), Regional Spatial and Economic Strategies, Guidelines issued by Minister under S28 Act, Directives under S29, Directions under S31...
- OPR is developing with stakeholders an objective <u>plans assessment</u> <u>methodology</u>



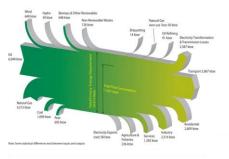
Challenges...







## **Trends**



14
12
10
8
6
4
2
2
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Industry Infransport Residential Services Agriculture & Fisheries

Transport is Ireland's largest Energy Use

Energy for Transport continues to grow

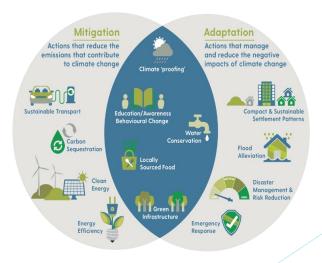


## **Opportunities**

- Ireland 4th highest EU state in energy intensity of transport patterns of development key...
- Next generation of city/county development plans a historic opportunity to show how, through planning, planning can lead in tackling the causes and effects of CC...
- 'Avoid-Shift-Improve' (ASI) approach "avoiding" energy demands through spatial density, 'shift' to active and public modes and 'improvement' of energy/carbon efficiency through behavior/technology...
- Government of Ireland Climate Action Plan commits to statutory plan evidence based measurement methodology (Action 65) need to have this in place for widespread imminent plan review processes triggered by National Planning Framework...
- Utilise Core Strategy Options and Strategic Environmental Assessment to quantify climate impact...



#### **Actions**





## CARO's



- Four regional climate action offices were established in 2018 in response to Action 8 of the 2018 National Adaptation Framework (NAF) Planning for a Climate Resilient Ireland...
- Builds on 31 LA and Govt signing Climate Action Charter...
- Initial focus on development of Climate Change Adaptation Strategies...
- Climate Action Regions determined by geographical and topographical characteristics, vulnerabilities and shared climate risks experienced...
- Island perspective missing?



## Legislation

- Section 10 (2)(n) (Mandatory Objectives for Development Plans: plan <u>must include</u> strategies and measures that through the location, layout and design of new <u>development</u>:
  - Reduces energy demand;
  - Reduces greenhouse gas emissions; and
  - Adapts to effects of climate change.
- What does this mean in practice???
- <u>Lower emissions</u> through modern mixed-use, plus, central location, plus good access to public transport...
- ▶ 0i
- Increase emissions through meeting major development needs in peripheral locations, single use areas, with private car dependence, low rental levels and a history of high levels of commuting.



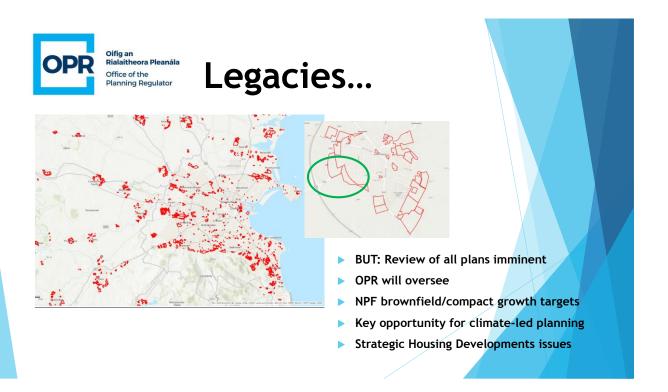
#### **Assessment**

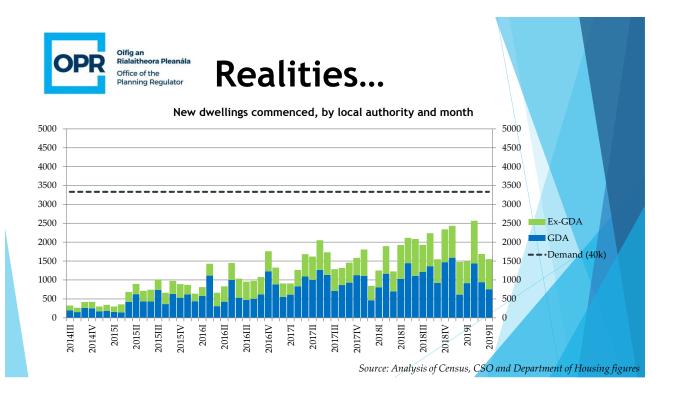
- OPR statutory assessments of plans will focus on practical actions on Climate Change:
  - Move away from objectives depending on car based mobility solutions and/or that are unlikely to be accessed primarily by sustainable travel modes...(calculating CO2 reductions)
  - Identify where/how renewable energy solutions can be rolled out in line with wider environmental considerations to go from 30% to 70% renewables...(analyse the potential)
  - Target areas for retrofit programmes in urban areas where energy efficiency/district heating solutions could enhance performance...
  - Consider the potential for plans designating specific areas as carbon sinks peatlands forestry...
  - Increase resilience of existing built-up areas and key infrastructure by stress-testing to extreme weather events...(flood/storm resilience)

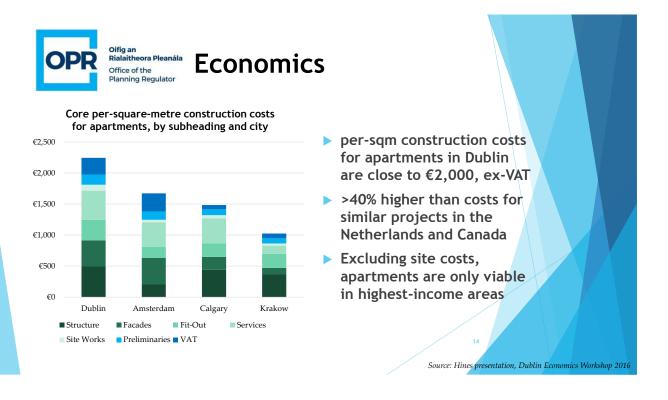


### Research

		Likely Effects on Direct Emissions		
		Emissions Increase	Neutral/ Moderate	Emissions Decrease
Land-use -		More residential		Less residential
		Old Residential		New Residential
		Single use [only residential, or commercial or indsutrail]	Mixed use including residential	Mixed use including residential
		Older, smaller, institutional, commercial, retail, industrial	Mixed	Large modern institutional, commercial, retail, industrial
	Use	Seasonal, weekend, occasional	Weekday/ 12/hr	24/7/365
	Status	Greenfield	Infill	Brownfield
	Location	Peripheral, dispersed		Central connected
	Condition	New peripheral  old poor condition		New central Old central
	Mode	Commute		Home-based Work-live
	Tenure	Public/shared use have lower awareness /responsibility	Institutional and commercial have varied awareness	Private user have higher awareness/ responsibility
Movement	Volume [number of movements]	High Movement numbers increase energy use		Low Movement numbers decrease energy use
	Volume [density of movements]	Low Movement Density Dispersed movements decrease use efficiency		High Movement Density Large numbers in one place increases use efficiency
	Distance [spatial]	Longer distance travelled [more emission likely]		Shorter distance travelled [less emission likely]
	Distance [time]	Less time travelled [less efficient use of energy]		More time travelled [more efficient use of energy]
	Mode	Private, cycle, pedestrian	Shared, low volume public, low emission private	High volume public









#### Reflections...

- Planning: major role to play in combatting drivers and effects...
- Evidence based metrics output capable assessment tools scarce...
- Significant legacy issues to address in Rol major (mainly road based) commuter belt land banks continue to activate/brownfield stagnates...
- ▶ Economics of compact/smart growth are key...
- OPR role challenges
- Yet! the alternatives are obvious
- Evidence/planning advocacy/community activation/leadership
- We don't have much time...



#### Remember!

- Every bit of warming matters...
- Every choice matters...
- Every year matters...

(IPCC 2019)