ESRI ECONOMIC & SOCIAL RESEARCH INSTITUTE

12th MaREI Climate & Energy Research Seminar

Residential renovations: understanding cost-disruption trade-offs

John Curtis, Gianluca Grilli & Muireann Lynch

Research funding

DCC

ESRI – Energy Policy Research Centre

MaREI
Centre for Marine and Renewable Energy

Background

- Are 500k B2 renovations feasible?
  - 36.2k to B2 by end 2023
  - 100,000s SEAI grant retrofits
- Grants working but..
  - How much of a barrier is ‘disruption’?
- Research focus:
  - Renovation as investment v life context
  - Renovation stages: who’s actually open to renovations
  - Pricing renovation disruption

Renovation stages

1. Not thinking about renovations
2. Thinking about renovations as a possibility
3. Planning renovations
4. Completed major renovations

	Renovation Stage	Survey Question
23%	Not thinking about renovations	We're content with our home as it is. We wouldn't dream of making any major changes to its layout or physical properties
30%	Thinking about renovations as a possibility	We are aware of things we could change about our home by renovating. We may go ahead and renovate at some point in the future, or we may not, it all depends. We haven't yet got a good sense of the costs, contractors available, and how to get the work done.
26%	Planning renovations	Planning renovation works but still finalising the details. We have some information about costs and financing options. We've talked to experts or contractors, and one or more has visited our home.
21%	Completed major renovations	Renovations are completed or all the details of our renovations are decided and renovations underway with contractors.

Renovation Scenarios

1. Capital Cost	€
2. Energy Cost Savings	%
3. Disruption	No invasive internal works; minor, moderate, or major internal works
~~4. Installation Time~~	~~weeks~~

Renovation Scenarios

1. Capital Cost	€
2. Energy Cost Savings	%
3. Disruption	No invasive internal works; minor, moderate, or major internal works
~~4. Installation Time~~	~~weeks~~

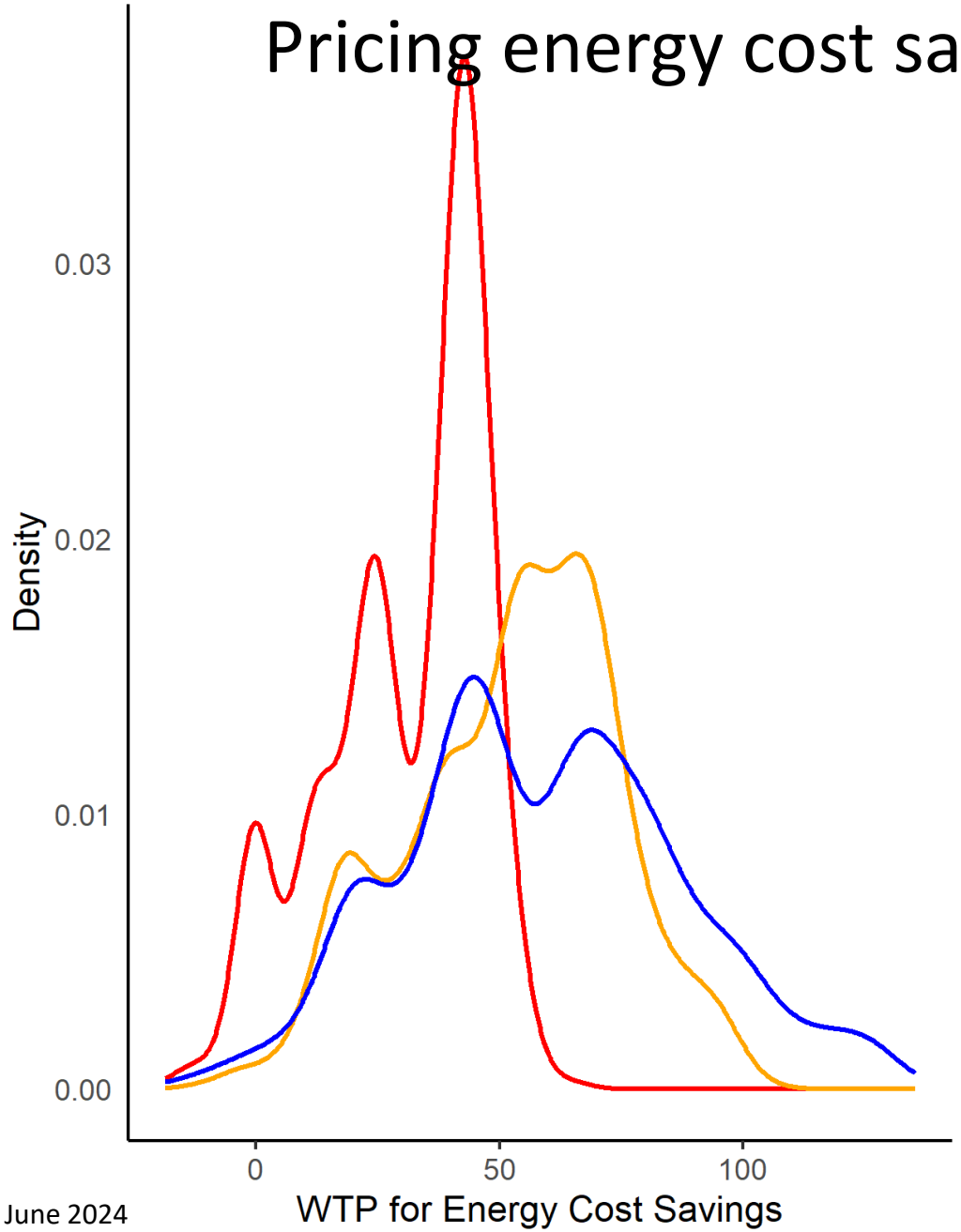
✦ **No invasive work** affecting walls, floors or ceilings — full use of property during renovations

✦ **Minor internal works**, dust and materials affecting use of some rooms during renovation

✦ **Moderate internal works**, some rooms are not suitable for use at times during renovations

✦ **Major internal works**, whole property is not suitable for use during renovations

Pricing energy cost savings



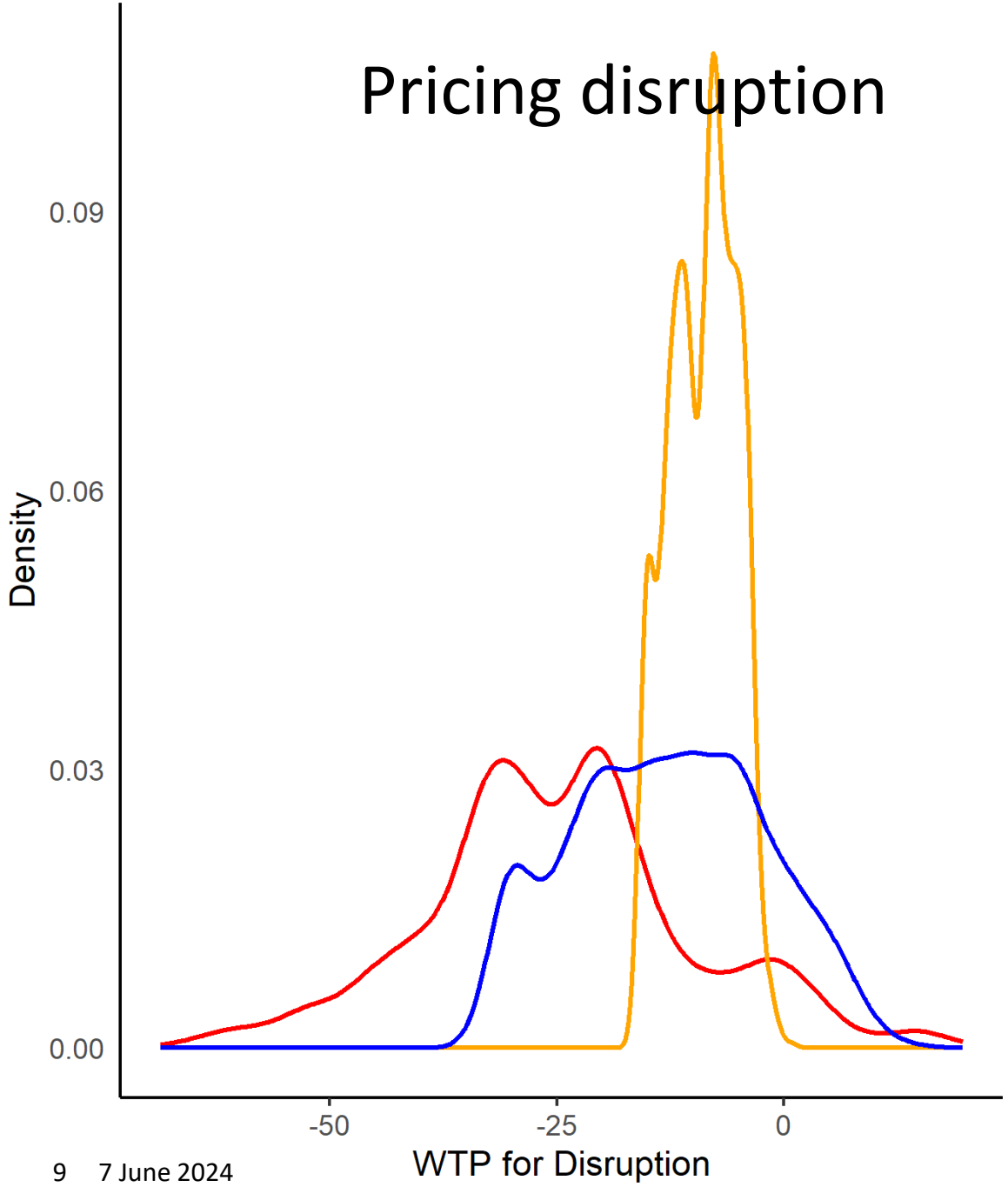
Mean WTP:

30% savings: €31k

50% savings: €53k

70% savings: €59k

Pricing disruption



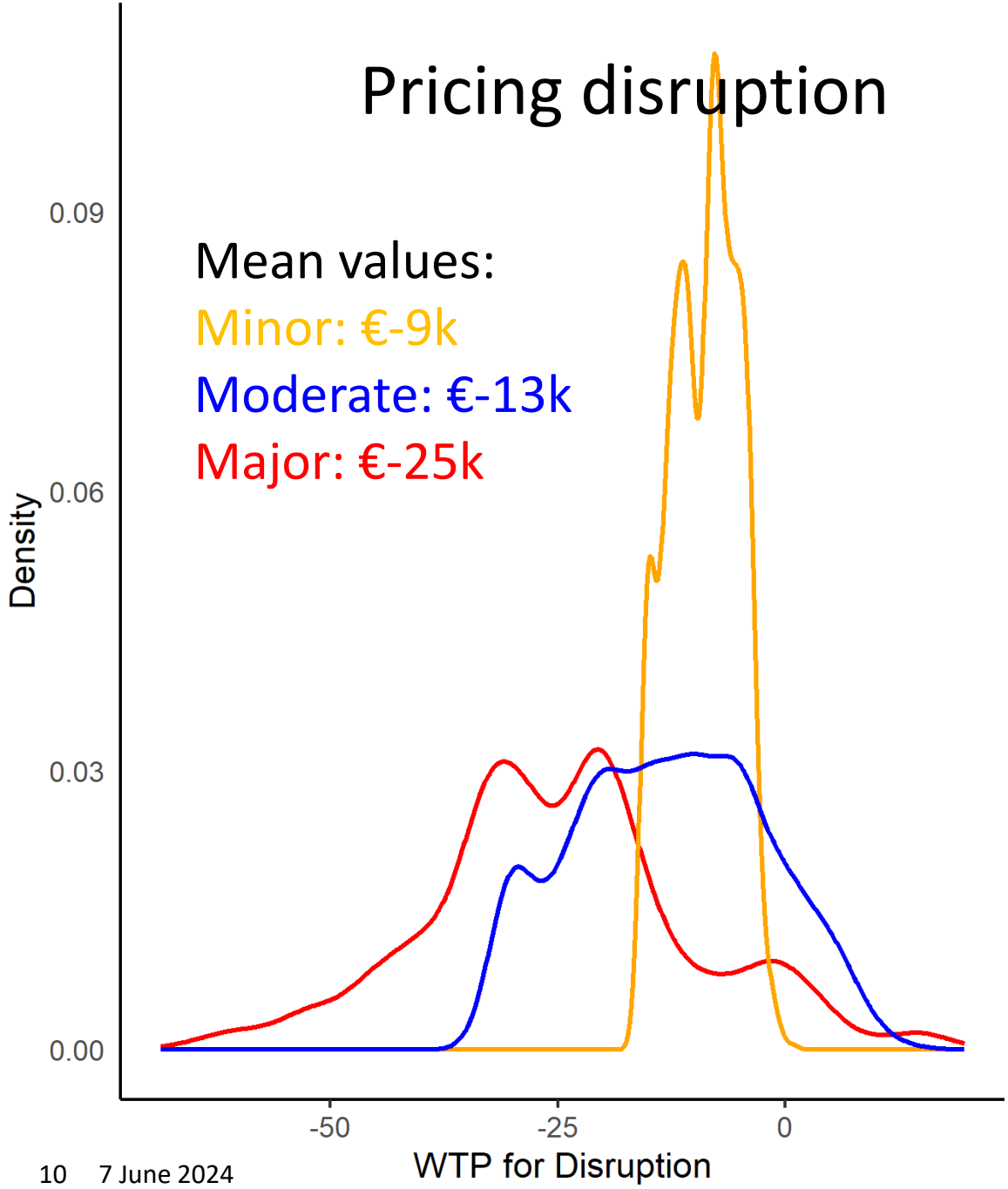
✦ No invasive work affecting walls, floors or ceilings — full use of property during renovations

✦ Minor internal works, dust and materials affecting use of some rooms during renovation

✦ Moderate internal works, some rooms are not suitable for use at times during renovations

✦ Major internal works, whole property is not suitable for use during renovations

Pricing disruption



✦ No invasive work affecting walls, floors or ceilings — full use of property during renovations

✦ Minor internal works, dust and materials affecting use of some rooms during renovation

✦ Moderate internal works, some rooms are not suitable for use at times during renovations

✦ Major internal works, whole property is not suitable for use during renovations

Conclusions

- Preferences for retrofits – the typical household is a rarity
- Just one-quarter are actively open to retrofit incentives
  - Grants focus on final stage of retrofit journey
- The ‘price’ of disruption can be substantial
  - How to address disruption barrier?
  - It’s not necessarily question of money
- 500k to B2
  - Many won’t follow the heat pump retrofit option
  - Are there alternative routes? Low disruption-low carbon