

Co-produced Route-mapping to Accelerate Freight Decarbonisation: A Transdisciplinary Learning and Decision Framework



**Decarbonising
UK Freight Transport**





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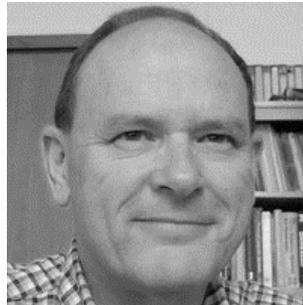
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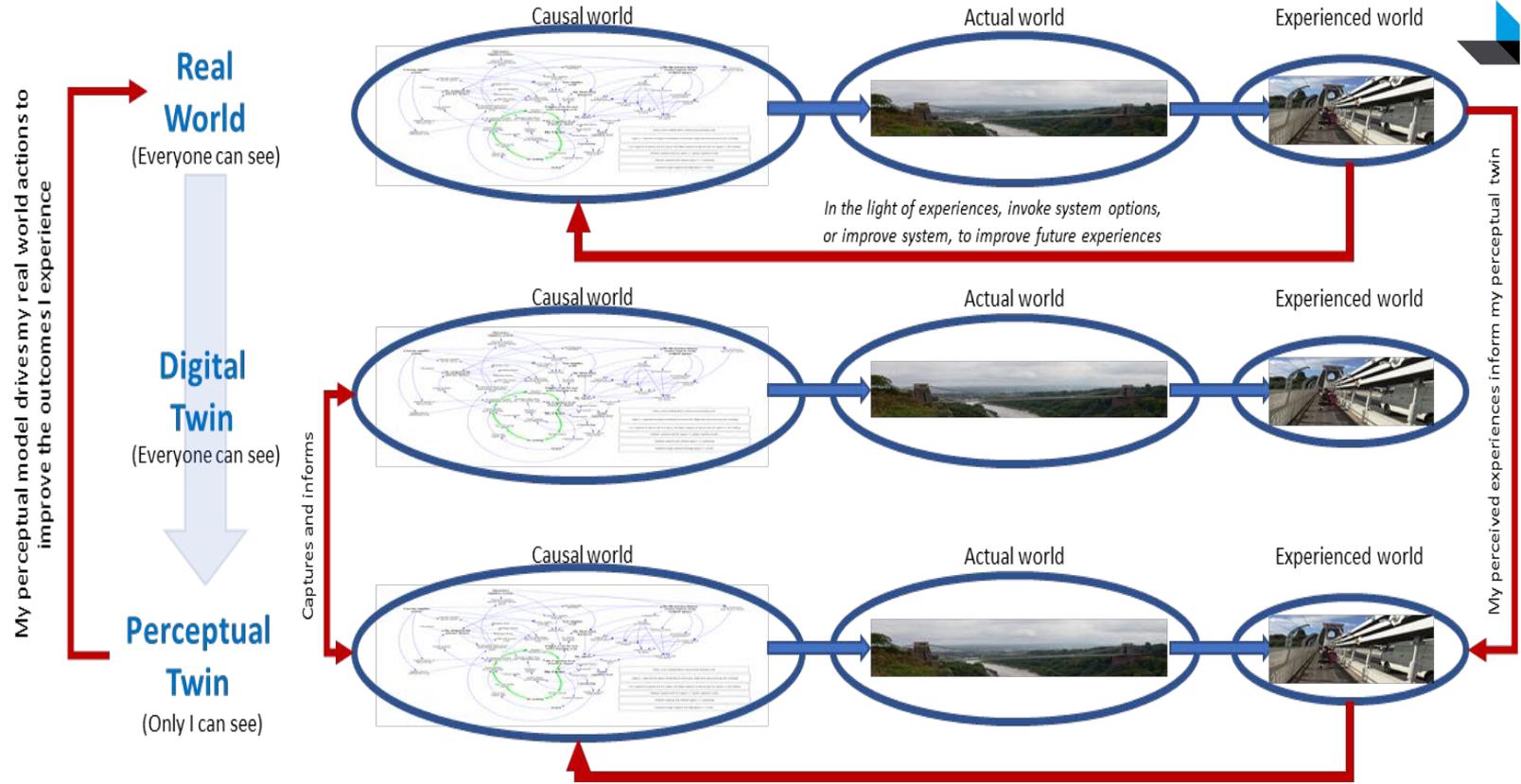
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Codesign with Stakeholders: Achieving a Shared Perspective is Critical for Real Progress



Key Questions

- What kinds of **methods and tools** most effectively support decisions contributing to the **design of a pathway** to decarbonise the future UK freight system, considering local, **regional**, and national scales and international implications?
- How can a full diversity of freight **stakeholders contribute and align** to decarbonising the freight system?
- What tensions in terms of **barriers to decarbonisation, or trade-offs, exist from a stakeholder perspective and** how might they be overcome?



Outcome of Stakeholder Mapping

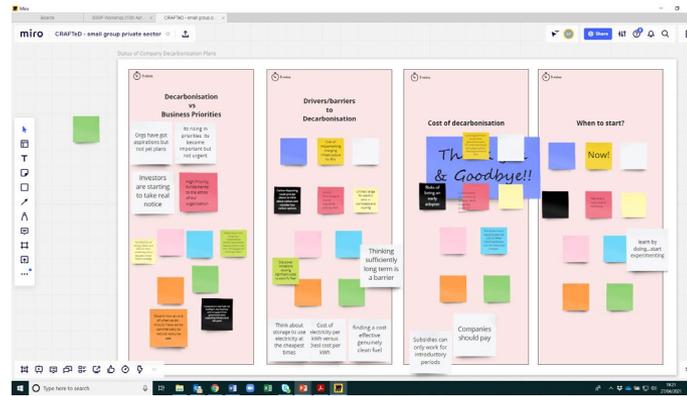
Relatively Engaged

- Larger organisations
- Concerned professionals
- Freight-oriented professionals
- Environmental/efficiency managers

Relatively Unengaged on this theme

- Smaller organisations
- Whole organisations
- Those without decarbonisation remit
- Those with passenger-orientation
- Energy sector
- Financial/strategic planning roles
- Citizens
- B2B customers (but some exceptions)
- Third sector

CRAFTeD Online Data Collection Events (Oct 2020-Apr 2021)



CRAFTeD 'own' data collection

Workshops 'in' SW x2

Small group 'focus' workshops x2

Expert panel x2

Collaborative data collection

CILT SW seminar series x3

SW Infrastructure Partnership decarbonisation workshops x3

With CoDeZero Project- workshop 'in' N. of England

Findings: methods for stakeholder interaction



- **Value exchange critical** i.e. informing vs co-producing?
- Scale of stakeholder events
 - **Not all organisations want to 'be in the same room'**
 - Appropriate use of **generalist and specialist** discussions
- **Pros/cons** of building on **existing networks** and discussions (e.g. infrastructure debates, professional bodies – ICE, CILT)
- Difficult step on **moving from problems to novel and applied solutions**
- **Online methods** good for range of engagement but also limited duration of events
- **External targets** provide useful frame of focus e.g. CCC 6th carbon budget

Findings: Relevance of Regional Level

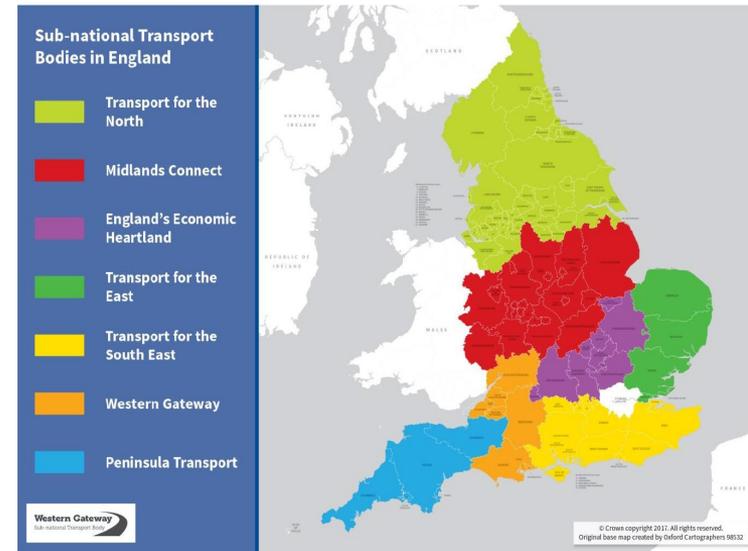


- Regional approach fits well with:

- Stakeholder **networking dynamics**
 - Important because behavioural-organisational change is critical!
- Existence of **Subnational Transport Bodies** with emerging responsibilities
- Other **regional-focussed complementary activities** e.g. SWIP
- Closer to **citizens** than national level

- Less effective for:

- Aviation
- Maritime
- Highly centralised/globalised organisations
- Citizens: insufficiently 'close' to city/neighbourhood



Findings: Wider Contextual Change



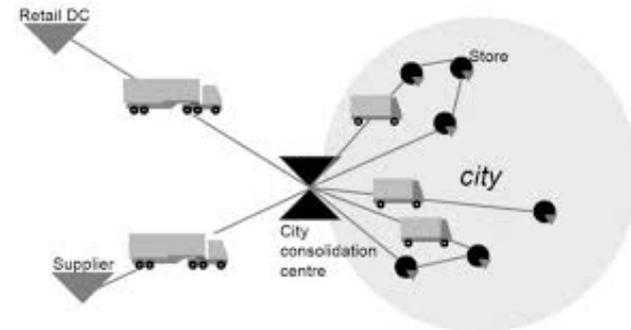
- **Tangible uncertainty (options fairly clear, decision needs to be taken, will be important)**
 - E.g. energy infrastructure
 - What energy solution(s) are we backing as a country?
 - Extent of constraints on policy decisions - what can we control/decide?
 - Do those decisions fit in with the global context?
 - Are regional variations possible/desirable?
- **Less tangible uncertainties (unclear if real issues for decarbonisation or not)**
 - Post-COVID reshoring
 - Post-Brexit trading relationships
 - Population evolution and distribution



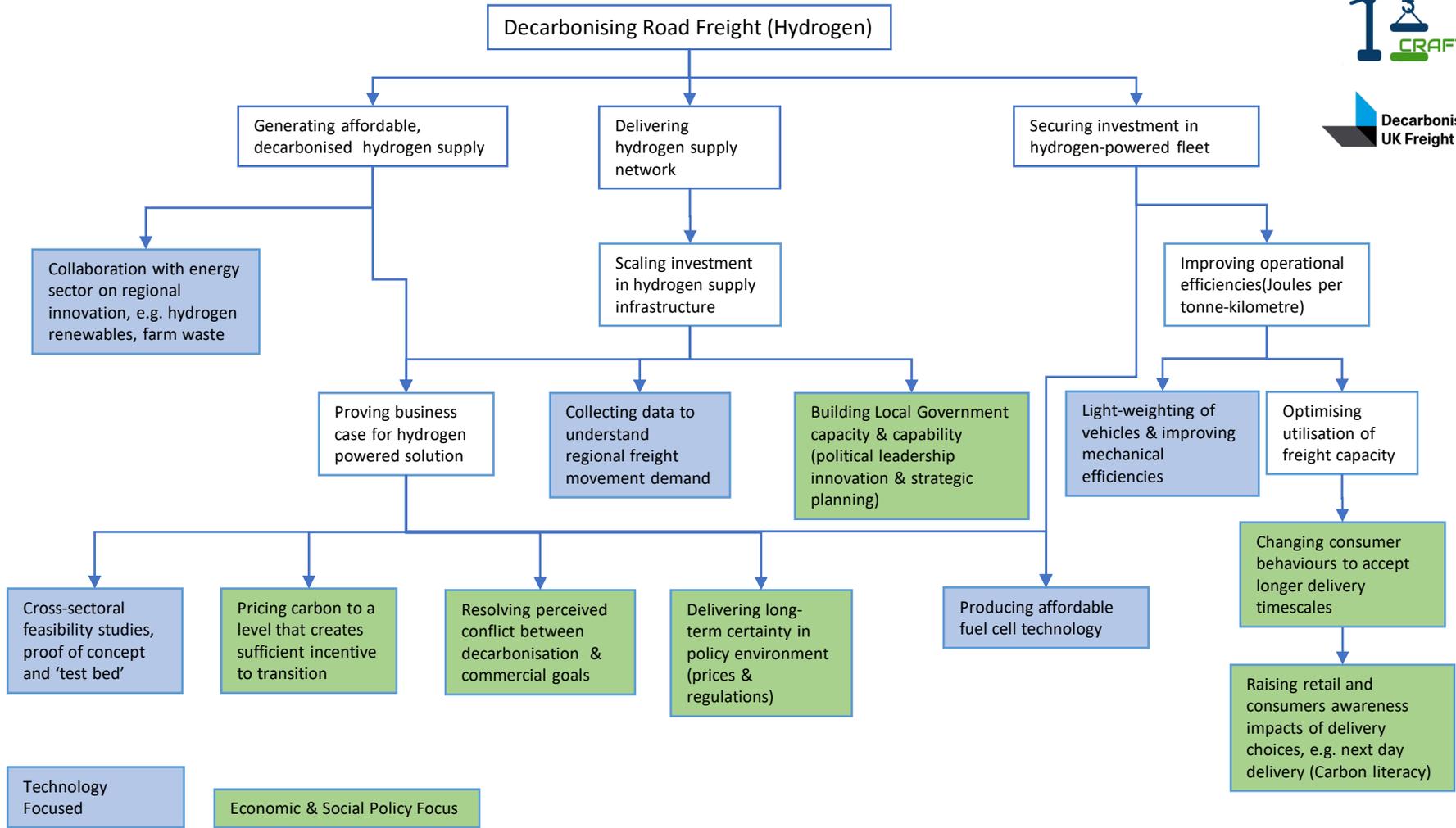
Findings: emerging 'routemap'



- **Timeline concept problematic**
 - misleading precision
 - Uncertainties
 - start and end points known, but routing/pathways will need to be 'dynamic'
 - task about planning possible routes – stakeholder and route resilience important
- **Sequence and dependencies** critical, also checkpoints/milestones
- **Networks** around the routemap as important as the content
- Potential foci for **early progress**
 - Collaboration/optimisation of HGV loads across operators
 - Urban logistics



Sequence and dependencies for...



Conclusions: Future Stakeholder Engagement



- **De-risking** as critical requirement associated with psychological investment/commitment to process
- **Pilots/demonstrations/'living labs'** critical
 - Confidence
 - practical knowledge exchange
- **'Demand side' stakeholders** must be convinced of role
 - freight should not be an externalised activity i.e. 'someone else's problem'
- **Communities of practice** to include small operators
- **Professional bodies** to develop further their freight network presences at regional/local level
- Develop **regional governance** responsibilities – could the STBs take on this role?



Conclusions:

Decarbonisation Policy Process Priorities



- Stakeholder engagement insufficiently broad and deep but committed pockets exist
- 'Highly siloed landscape': freight is the topic but that is a turn-off for some key stakeholders
- Regional level relevant for stakeholder engagement in respect of specific flows/modes/responsibilities
- 'Routemap' as a stakeholder coordination frame of reference, not a plan, but it needs to reduce risk and reward policy-desired behaviours
- National-led targets/incentives/regulation essential if decarbonisation is to be prioritised above other demands
- Nationally coordinated infrastructure prioritisation/investment essential
- Need to explore carbon pricing as a value-creating mechanism



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