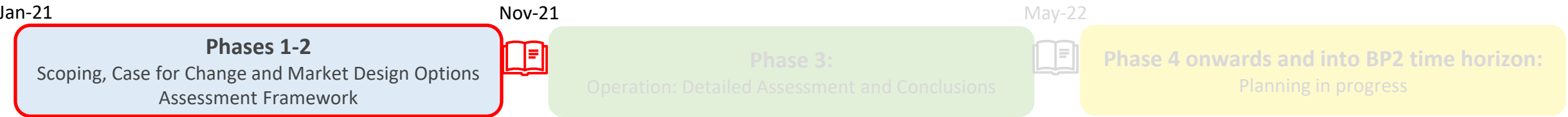
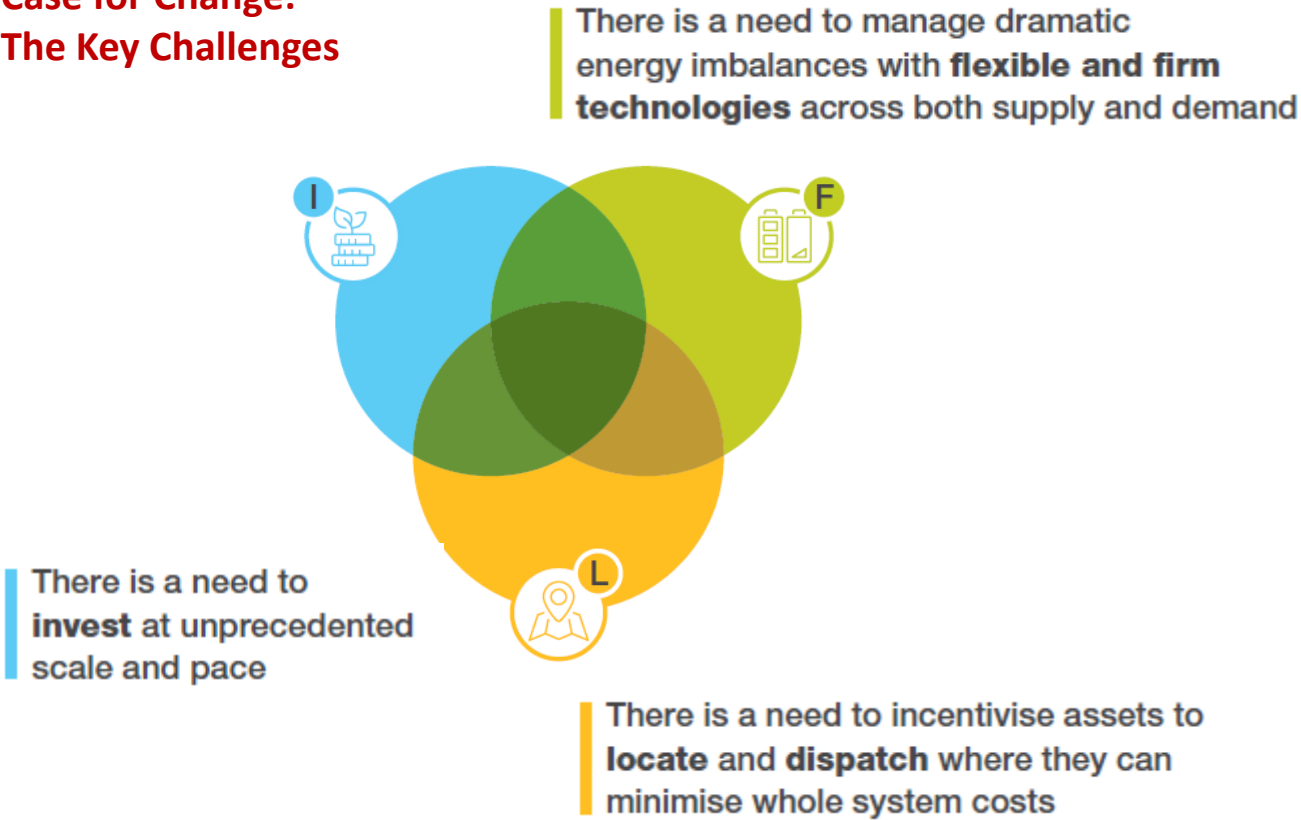


# Net Zero Market Reform

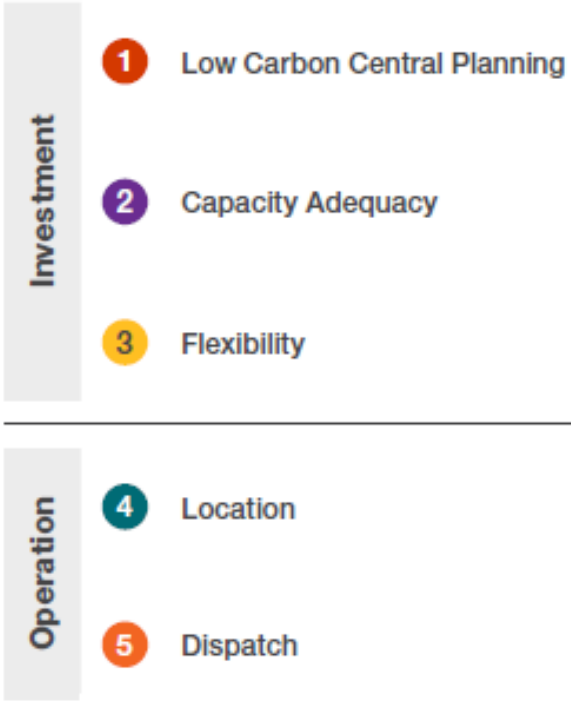
ESO's Net Zero Market Reform programme is exploring holistically the changes to current GB electricity market design that will be required to achieve net zero



## Case for Change: The Key Challenges

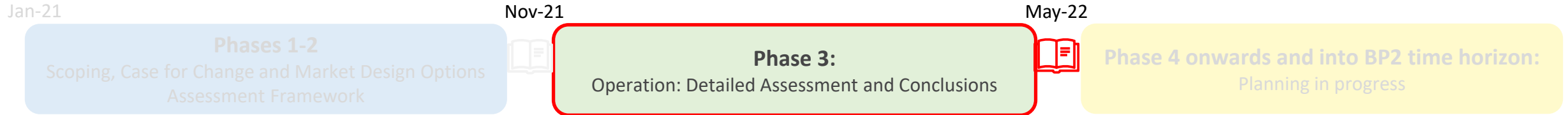


## Market Design Options Assessment Framework: First Order Elements



# Net Zero Market Reform

*ESO's Net Zero Market Reform programme is exploring holistically the changes to current GB electricity market design that will be required to achieve net zero*



## Context

- Constraint costs are rising at a dramatic rate
- Balancing the network is becoming more challenging and requires increasing levels of inefficient redispatch
- Flexible assets are at times exacerbating constraints
- Current market design does not unlock the full potential of flexibility from both supply and demand

## Approach

- Initial focus on Operation elements (location/dispatch)
- Assessment was qualitative based against criteria

## Results

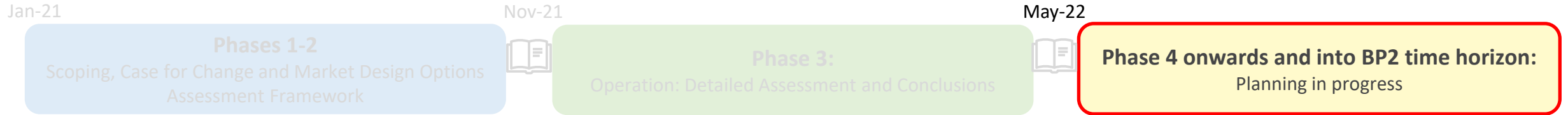
- Nodal pricing and central dispatch scored highest overall

## Conclusions

- Status quo will not deliver net zero cost effectively
- The most efficient solution to this is real-time dynamic locational signals through nodal pricing combined with central dispatch (with self-commitment)
- Highest potential to deliver significant consumer benefits through greater competition and efficiencies (energy/reserves co-optimisation; optimised network/resource investment; efficient dispatch)

# Net Zero Market Reform

*ESO's Net Zero Market Reform programme is exploring holistically the changes to current GB electricity market design that will be required to achieve net zero*



## 1) Detailed assessment of nodal pricing and central dispatch design and implementation considerations, including impact on stakeholders

- Key market participant cohorts
- Consumers
- DNOs
- ESO Control centre

## 2) Assessment of other market design elements under a nodal pricing and central dispatch model

- Low carbon central planning
- Capacity adequacy
- Flexibility
- Low carbon support mechanism
- Settlement period duration
- Ancillary services market design

## 3) Support BEIS and Ofgem in their respective market reform work (REMA and locational pricing technical assessment)

Please visit our dedicated webpage or contact the team ([market.strategy@nationalgrideso.com](mailto:market.strategy@nationalgrideso.com))