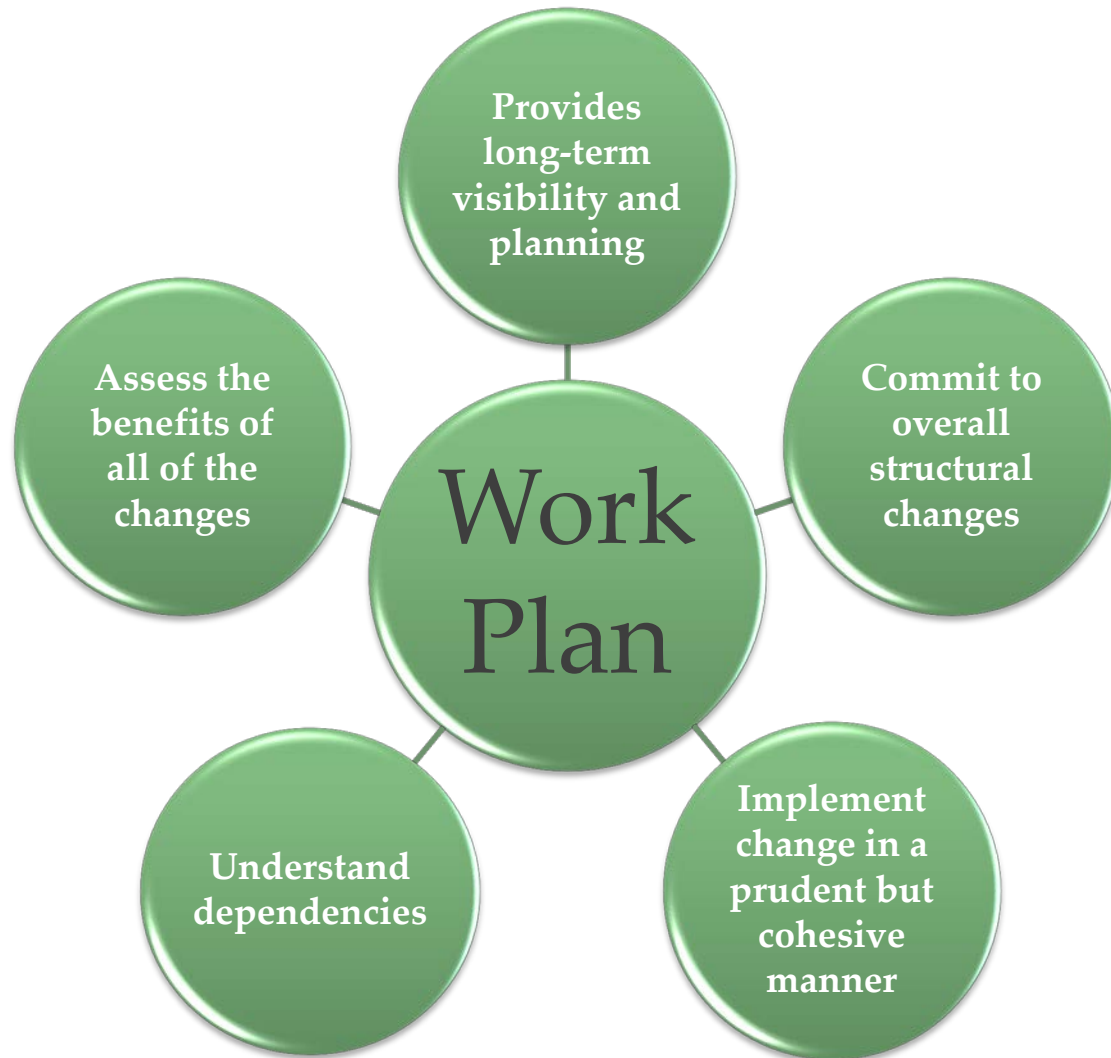


DEVELOPING A MARKET RENEWAL WORKPLAN

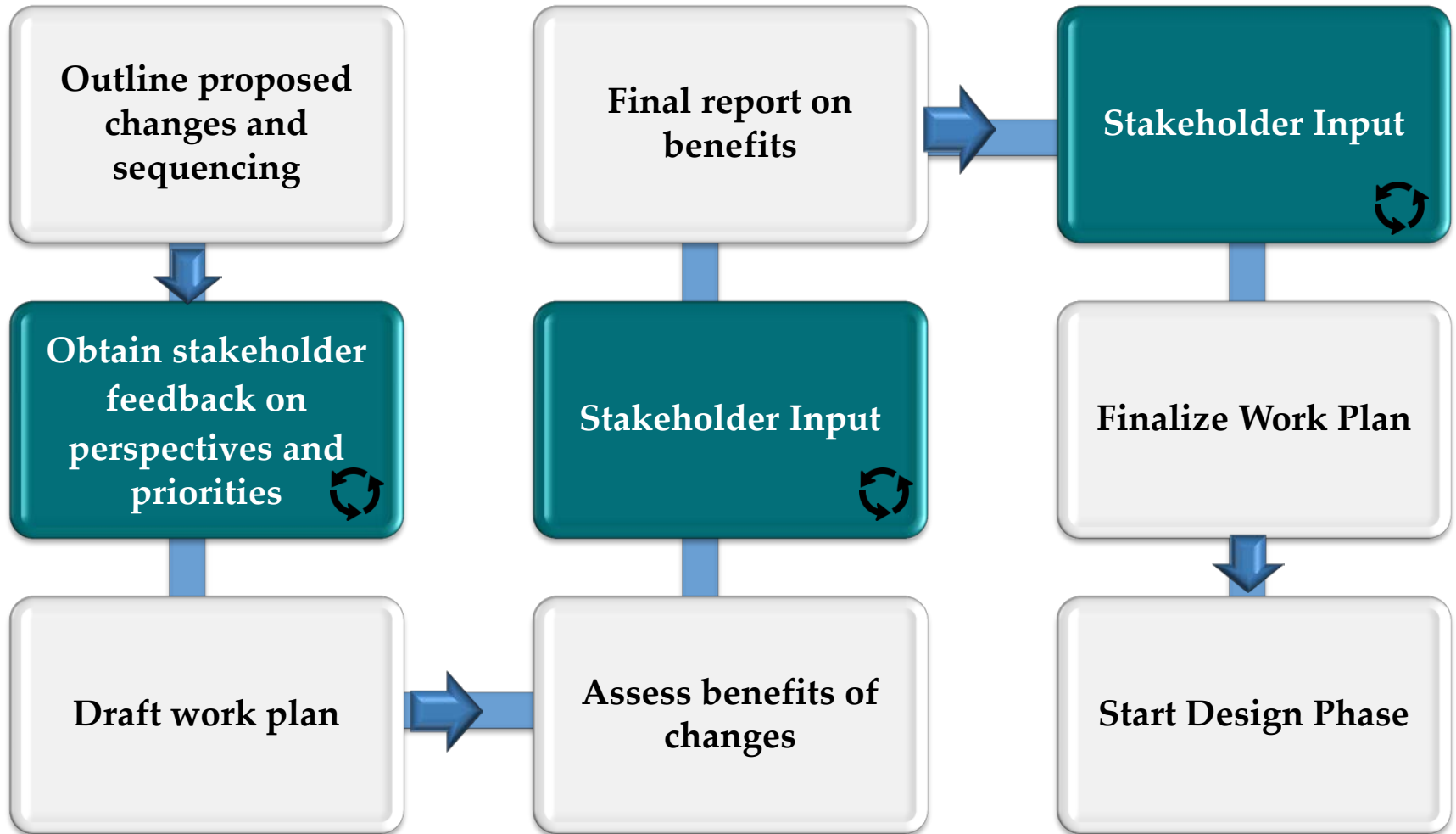
Tom Chapman and Barbara Ellard
Markets, IESO

April 19, 2016

Why Develop a Work Plan?



How to Develop the Work Plan?



Sequencing of Changes

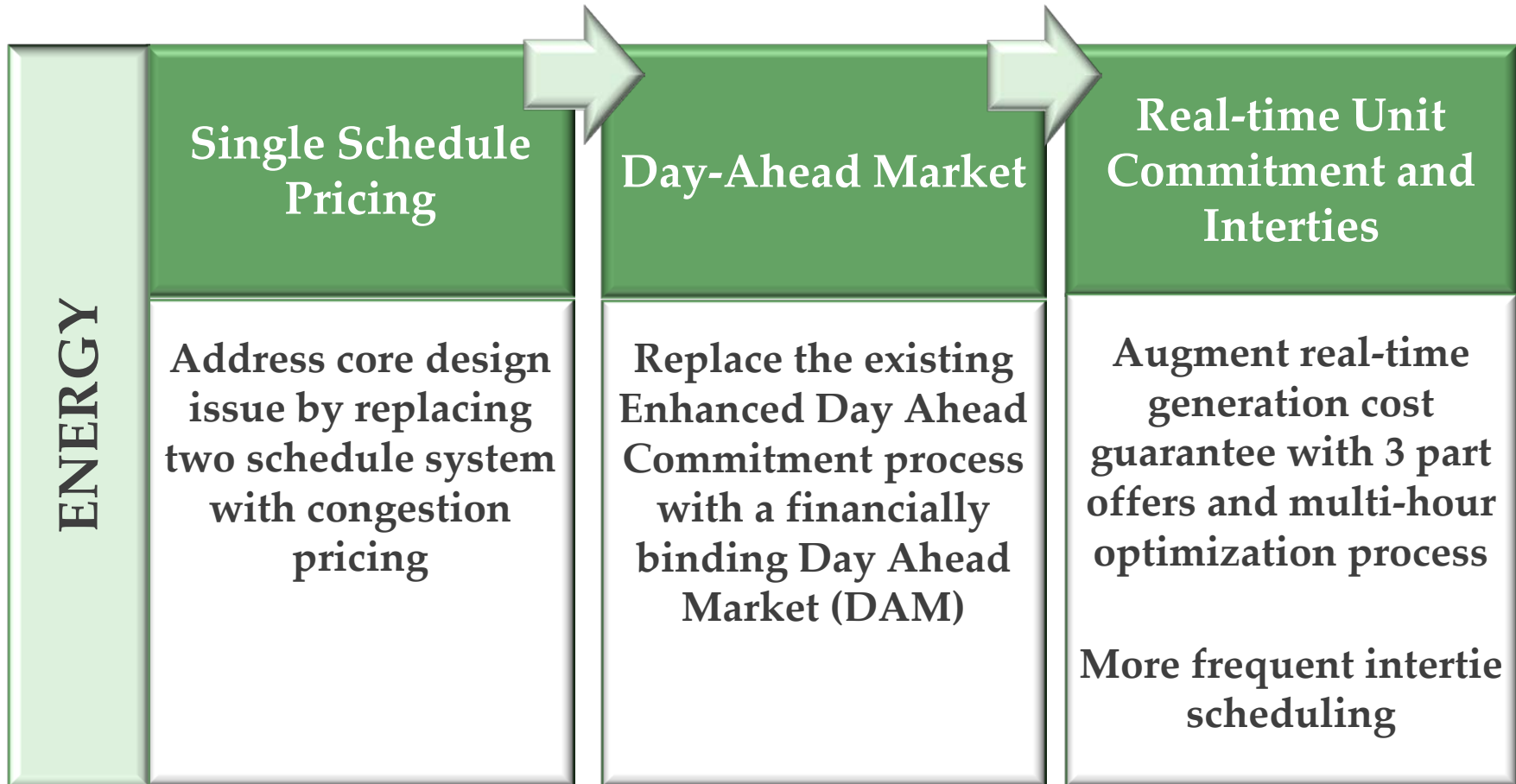
How to decide on sequencing of different components?

- Dependencies and linkages
 - Key structural changes to facilitate subsequent changes
- Existing inefficiencies and future benefits
- System needs, operability and reliability considerations
- External factors
 - Stakeholder needs
 - Emerging technologies
 - Structural changes
 - Policy priorities, OPO, LTEP

The Enabler: Single Schedule Pricing

- Replacing Ontario's unique and highly complex Two Schedule pricing system will not only address known market inefficiencies and gaming opportunities, but also enable subsequent changes
- Previously, the IESO developed a Day-Ahead Market design but recognized that the **Two Schedule pricing system created significant complexities**
 - Would have impacted transparency and added implementation challenges for the Day-Ahead Market
- As a foundational project, design options will start to be explored in late 2016

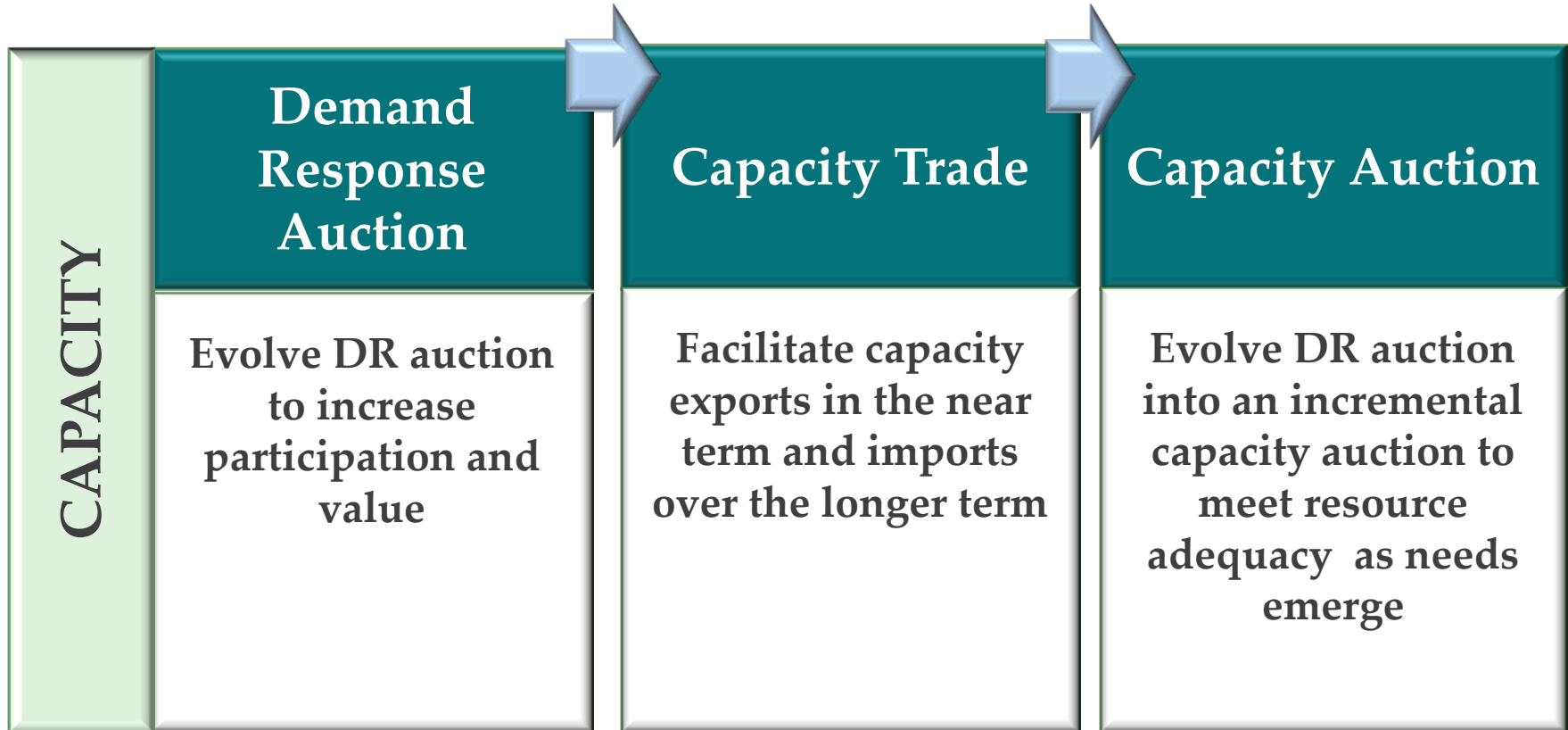
Proposed Sequencing: Energy



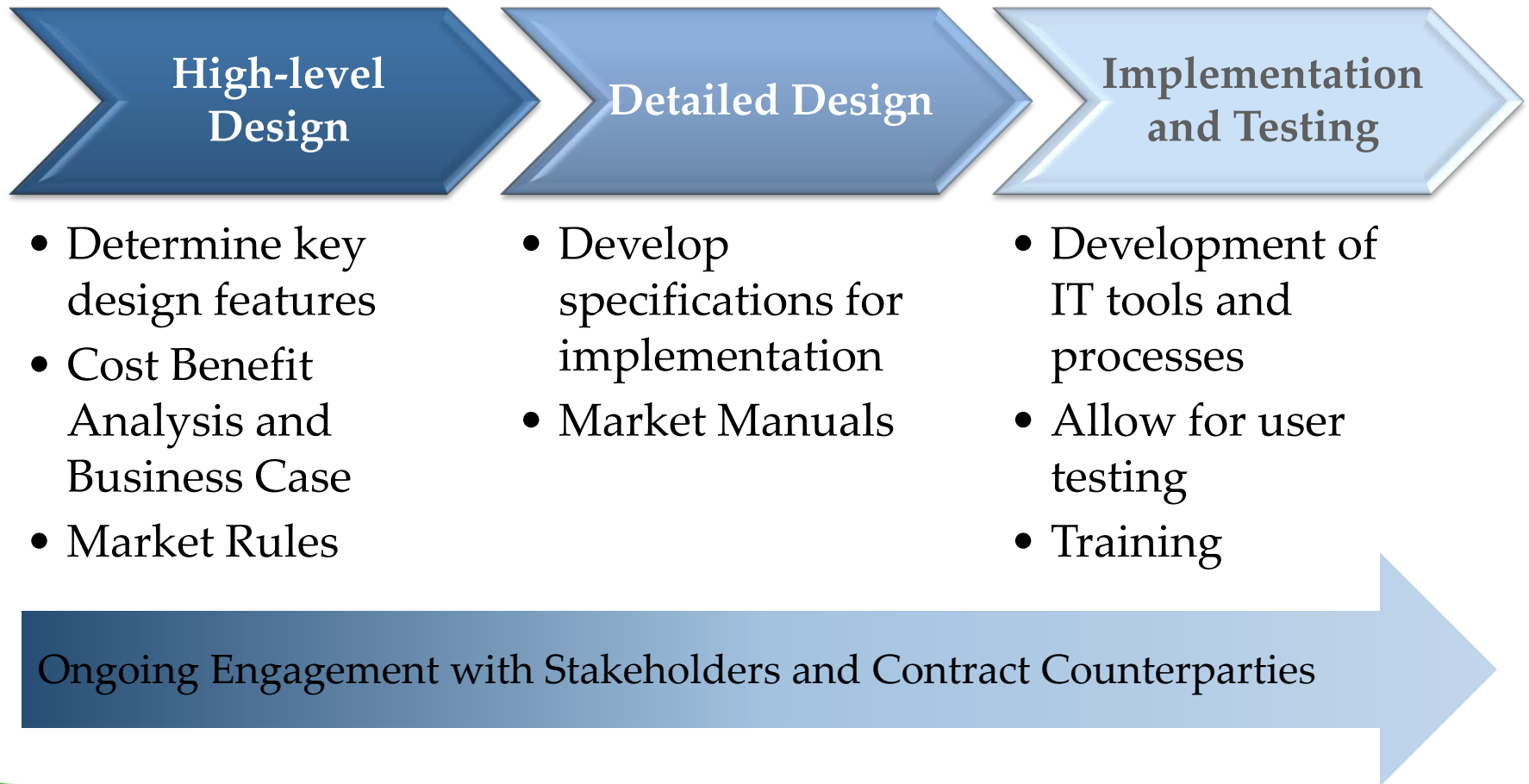
Growing Capacity in the Market

- The IESO is committed to fostering market-based mechanisms to incentivize the development of new resources, when needed, and maximizing capacity from existing assets
- The Demand Response Auction was a great success and will continue to evolve to ensure the growth of demand-side resources
 - The IESO is working on some enhancements to expand the participation to different types of resources, meet regional needs and preferences
- Trading capacity with our neighbours will provide new opportunities for existing assets
- Longer term, a capacity auction will be a key tool for procuring new capacity during times of need

Proposed Sequencing: Capacity



Developing and Implementing Change



Illustrative Approach to Sequencing

Single Schedule Pricing



Day-Ahead Market



RT Unit Commitment/Interties



Emerging Issues

- Work plan focused on addressing known issues
- Emerging issues have the potential to overlap with work plan projects, for example:
 - Operability issues may require changes to energy markets or even development of additional market mechanisms
- In addition, there will be other market improvement work that will have to be managed in parallel
 - These market improvements could stem from issues identified by the IESO, MSP or sector
- IESO will have to adequately assess the need and time for any such improvements in light of the structural changes under the Market Renewal work

Additional Considerations

- In addition to coordinating this work with other market projects, the IESO will also need to take the following issues into account:
 - Internal and external resource constraints
 - Coordinating with planned and future IT upgrades and changes
 - Contractual impacts, as appropriate
 - Governance considerations
- The focus will be on finding solutions and approaches that are practical and achievable without losing sight of the overall goal of improving the market

NEXT STEPS

Making our Case



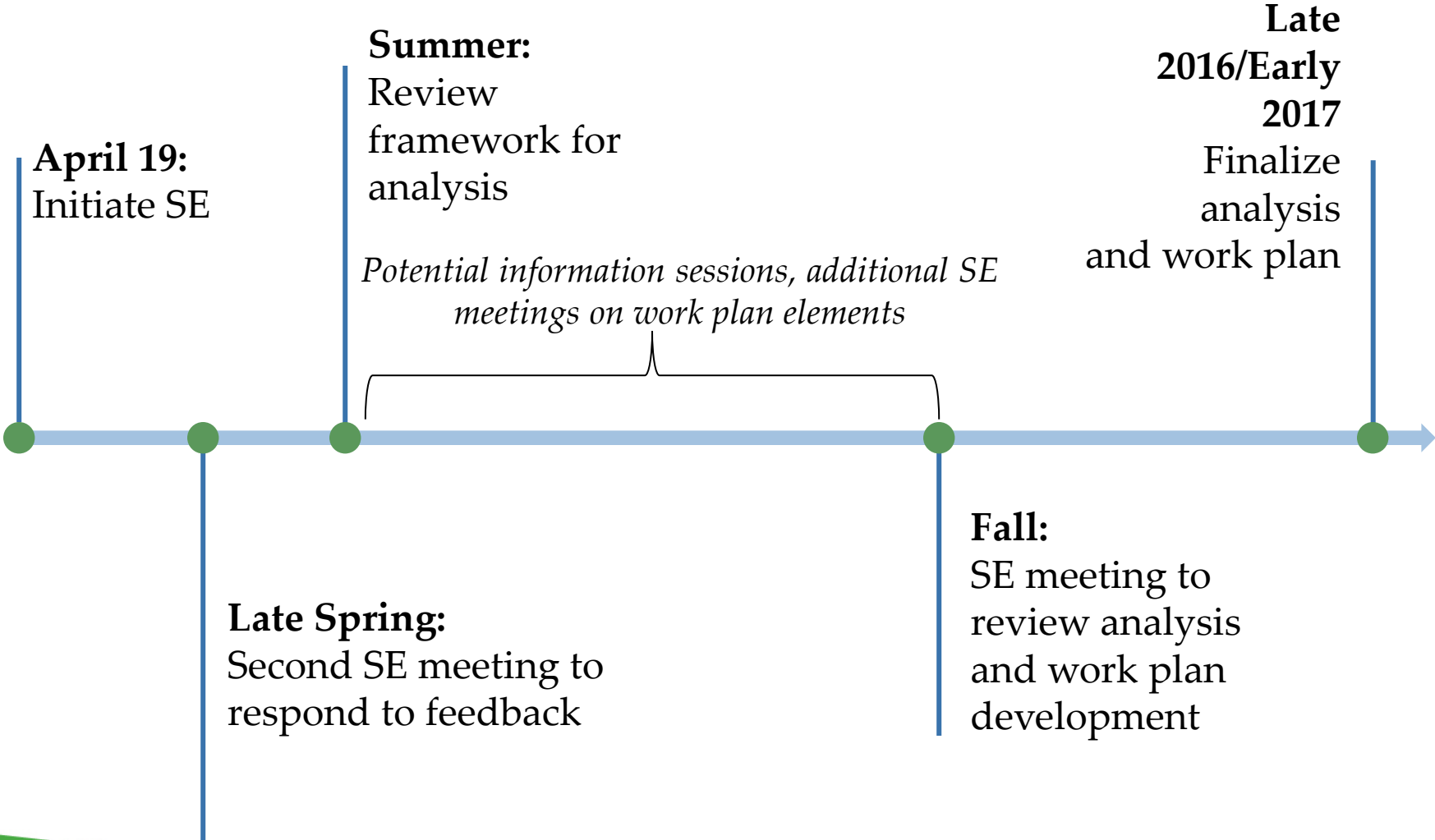
The IESO will be engaging third party experts to assist with various elements

A key deliverable will be a qualitative and quantitative assessment of the market renewal projects

This would include reviewing the projects holistically – given dependencies – as well as individual assessments

This assessment will be a core element of this engagement

Proposed Near-term Timeline



Stakeholder Engagement

- The IESO is committed to working collaboratively with stakeholders to identify the right set of projects to include in the work plan
- Opportunity to provide your input, table your views and contribute to the development of our future markets
- **How do you want to be engaged going forward?**
 - What is the appropriate forum to engage in more technical discussions? Open forum or separate working groups or standing committees?
 - Is there interest in IESO facilitating information sessions?
 - What is the appropriate frequency of engagement?

Next Steps

- Stakeholder feedback due May 6, 2016
- Please send to engagement@ieso.ca

Thank You