
Renewable Energy Transmission Initiative v2.0

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Imperial Valley Renewable Energy Summit

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California Public
Utilities Commission



California Energy
Commission



California ISO



CalEPA
California Environmental
Protection Agency

Salton Sea Task Force Agency Actions

Consider opportunities for increasing renewable energy development at and around the Salton Sea:

- As part of the implementation of the Clean Energy and Pollution Reduction Act of 2015 (SB 350), the California Energy Commission and the Public Utilities Commission will evaluate how
- **As part of the implementation of the Clean Energy and Pollution Reduction Act of 2015 (SB 350), the California Energy Commission and the Public Utilities Commission will evaluate how renewables at and around the Salton Sea will further the goals of the integrated resources plans, including a balanced resource mix and the minimization of localized air pollutants.**
- **Within the next year, as part of planning to meet the 2030 greenhouse gas goals, the Public Utilities Commission, the Energy Commission and the Independent System Operator will consider renewable energy opportunities at and around the Salton Sea and the region, and any additional transmission that may be needed for the near term**



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2016 – a year of changes

Executive Order B-30-15

- Established 40% GHG reduction goal by 2030
- Mandates state agencies to pursue with all statutory authority
- New **ARB Scoping Plan**

SB 350

- Increase **Renewable Requirements** from 33% by 2020 to **50% by 2030**
- Requires **resource optimization** and an **Integrated Resource Planning (IRP) process**
- Expresses intent for **regional expansion of the CAISO**
- Consider **disadvantaged communities** in CPUC and CEC decision-making process
- Encourages **widespread Transportation Electrification**

California Independent System Operator

- Regional expansion planning
- Transmission Planning complete for 33%; “considerable work” necessary to plan for 50%

Western developments

- Clean Power Plan
- OR, WA, NV policy developments
- Mexico electricity sector reform



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IRP, Resource Optimization, and LCBF Reform

454.51. The commission shall do all of the following:

(a) Identify a diverse and balanced portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy in a cost-effective manner. The portfolio shall rely upon zero carbon-emitting resources to the maximum extent reasonable and be designed to achieve any statewide greenhouse gas emissions limit established pursuant to the California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500) of the Health and Safety Code) or any successor legislation.

(b) Direct each electrical corporation to include, as part of its proposed procurement plan, a strategy for procuring best-fit and least-cost resources to satisfy the portfolio needs identified by the commission pursuant to subdivision (a).

454.52. (a) (1) Commencing in 2017, and to be updated regularly thereafter, the commission shall adopt a process for each load-serving entity, as defined in Section 380, to file an integrated resource plan, and a schedule for periodic updates to the plan, to ensure that load-serving entities do the following:

(A) Meet the greenhouse gas emissions reduction targets established by the State Air Resources Board, in coordination with the commission and the Energy Commission, for the electricity sector and each load-serving entity that reflect the electricity sector's percentage in achieving the economywide greenhouse gas emissions reductions of 40 percent from 1990 levels by 2030.

(4) The commission shall adopt, by rulemaking, all of the following:

(A) A process that provides criteria for the rank ordering and selection of least-cost and best-fit eligible renewable energy resources to comply with the California Renewables Portfolio Standard Program obligations on a total cost and best-fit basis. This process shall take into account all of the following:

(vi) Consideration of any statewide greenhouse gas emissions limit established pursuant to the California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500) of the Health and



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RETI 2.0 Objectives

- Statewide, non-regulatory planning effort to help meet statewide GHG and renewable energy goals.
- Explore combinations of renewable generation resources in California and throughout the West that can best meet goals
- Build understanding of transmission implications of renewable scenarios, and identify common transmission elements
- Identify land use and environmental opportunities and constraints to accessing these resources
- Inform future planning and regulatory proceedings



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RETI 1.0

- 2008-2010 Stakeholder-driven process
- CA RPS going from 20% to 33%
- Goal to examine where the resources are and transmission necessary to access them
- Institutionalized CPUC RPS Calculator and CAISO Policy-driven Transmission Planning
- Supported some major Tx lines with public outreach, identification of issues, and acceleration of solutions



RETI 2.0

What's different this time

- Accelerated; high-level
 - Report by October 2016; influence 2017 IRP and TPP
- Leverage extensive work and analysis to date
 - Renewable potential, technologies, transmission options, system operations, and market opportunities
 - Land use and environmental data and planning
 - Desert Renewable Energy and Conservation Plan and San Joaquin Valley Solar Initiative
- Emphasis on long-term resource portfolio optimization and GHG reduction
 - Majority-renewables CA grid
 - Buying and selling complementary resources across the West
 - Transmission opportunities to realize these multiple goals



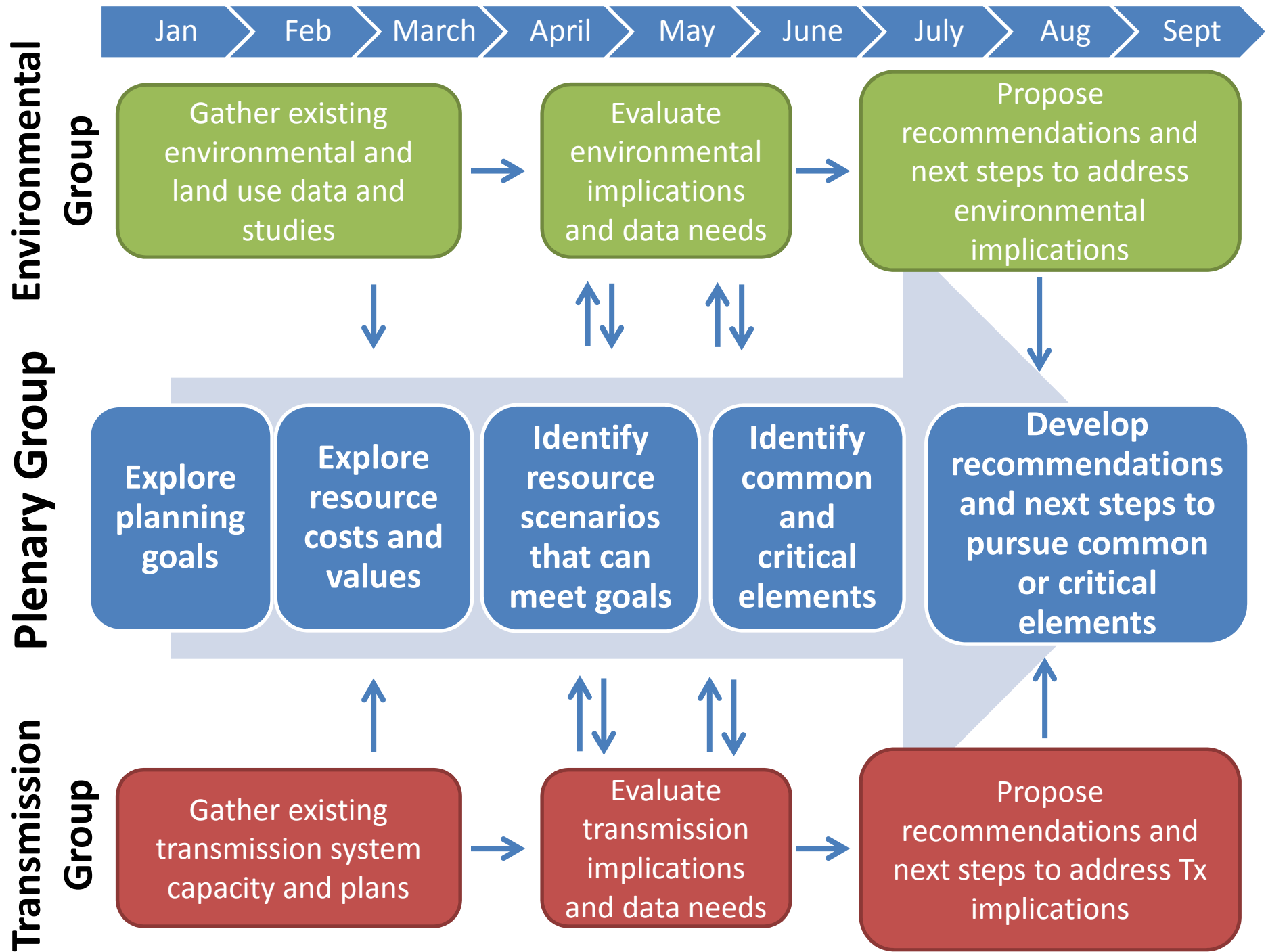
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Thank you!

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