

Data Center Workgroup Members' List of Possible Topics

1. Energy & Grid Infrastructure (26)

Topics focused on energy demand, clean power, transmission, and grid planning.

Data center energy use & grid resilience

Meeting state's clean energy targets while adding new load

Resource adequacy implications of large loads (data centers and other) planned

Data center energy use

Data center energy use (energy sources, demand flexibility, energy efficiency, backup power)

Clean energy integration and emissions reduction

Power purchase contracts

Opportunities for CETA and new energy resources to co-exist

Electricity rate implications from large loads

Transmission planning/permitting

Large load implications on carbon policies

Policy on SMR (small modular reactor) and other new nuclear technologies, hydrogen infrastructure

What alternative generation sources could be adopted to increase schedulable and dispatchable energy to local and regional customers.

Projected data center energy use/demand growth

Balancing the need for capacity, reliability, and affordability along with the state's climate goals as it relates to keeping data centers viable in WA rather than other states that have more lenient carbon timelines/goals.

Feasibility of using data center backup generation systems to support peak demand loads?

Transmission, interconnection, and distribution system needs/impacts of data centers (Can data centers support investments in transmission and distribution, including grid-enhancing technologies (GETs)?)

Can the state transition to 100% renewable energy fast enough to meet both climate and data center energy needs? If so, how?

Infrastructure modernization (power, fiber, cooling)

What utility/data center partnerships could exist to enable government programs or legislation to expedite the build transmission faster?

Infrastructure bottleneck challenges

How AI might affect traditional data center loads

CETA compliance implications

The potential for improving the efficiency of cooling loads for data centers represents one of the largest potential sources of energy efficiency in the region.

Building resources and transmission for data centers will be very expensive. These costs should be borne by the data centers. If not, the electricity costs for all consumers will go up. The percentage of low-income households is higher on tribal reservations than the general population.

Regional energy coordination

2. Economic, Environmental & Community Impact (20)

Topics centered on local benefits, environmental effects, education, and broader societal goals.

Data center economic development at the local level

Data center sustainability efforts

Innovation for cost implications

Data Centers' local community impact

Leveraging tech companies to help with clean energy transition (possible private partnerships?)

Understanding education activities that support them that also rely on data center capacity (research, K-20 education)

Data center workforce needs & numbers

Community engagement and zoning

How can data centers provide tangible community benefits (e.g., employment, housing, and distributed energy resources to the local community)

Data sovereignty and security compliance

Building public awareness and trust

Understanding water usage requirements and water-saving strategies/policies

AI and advanced technology impacts

Regional impacts of data center growth - demand forecasts, resource adequacy, transmission

Workforce development and STEM education

Data center growth and decarbonization (achievement of state climate and clean energy goals, power system optimization)

Regional resource adequacy impacts

Data centers can also affect water use. They should not be sited near streams and rivers where this will harm fish and wildlife.

The best practice building systems significantly reduce peak loads. These loads are the most expensive to serve, stress the generating and transmission system, and the peak hydro operations kill migrating salmon.

The amount of data centers' load that is in recent energy forecasts will significantly stress the NW power system. When the system is stressed, fish protections get reduced or eliminated.

3. Policy, Planning & Regulation (13)

Topics involving legislation, definitions, permitting, rates, and regulatory strategy.

Data centers' current & planned impact on WA's CETA requirements.

Defining what data centers are for the purpose of our work

Permitting timelines in Ecology and Labor & Industries for data center projects

Renewable energy permitting

Legislative solutions: Analysis of other state's approaches

Tax incentives and economic development

Rate impacts of data centers (specific data center tariffs, ring-fencing)

Philosophical approach to solution design

Understanding what data center capacity is required to meet short and long-term state economic development goals

Growth Management Act and state land use challenges

Ratepayer protections

Creating good communication channels between data centers, utilities, state agencies, BPA and others

State strategy towards participating in the AI race as a national security concern