PURPOSE: WHY WE EXIST

Delivering for our hometowns

Serving our planet

Leading with love

STANDS: WHAT WE WILL DELIVER

PEOPLE

Everyone and everything is always safe

Catastrophic wildfires shall stop

It is enjoyable to work with and for PG&E

PLANET

A healthy environment and carbonneutral energy system shall be the reality for all Californians

PROSPERITY

Our work shall create prosperity for all customers and investors

OUR 10-YEAR TRUE NORTH STRATEGY

PG<mark>&</mark>E

WHERE WE ARE HEADED

CUSTOMERS

Rebuild trust with our customers and our local communities by delivering affordable energy & excellent customer experiences every day

ENERGY SYSTEM



Electric

- Decarbonized 24 x 7 x 365
- Optimized to local and system needs

Unleash the **full potential of electric** vehicles



Continue to **invest in a safe and reliable gas system**

Boldly shape the future through:

- Targeted electrification
- Gas
- Greening the gas supply
- Shaping California's policy

HOW WE WILL DO IT

FOUNDATIONAL CAPABILITIES

- Public & workforce safety and risk mitigation
- Diversity, equity, inclusion & belonging
- PG&E Performance Playbook

- Coworker development and well-being
- Simple, affordable financial model
- Efficient end-to-end work management system

- Regional service model
- IT platforms and data management capabilities
- Stakeholder, policy, and regulatory advocacy

VIRTUES: WHO WE ARE

Trustworthy, Empathetic, Curious, Tenacious, Nimble, Owners

Energy System Initiatives



R&D Strategy Approach



Electric Vehicles

THEME 1

Ensure affordable and timely connection for every customer

3 PROBLEM STATEMENTS

- Manage load to avoid physical upgrades
- Scalable low-cost charging for multi-family buildings
- Streamline charger installation process

THEME 2

Unlock potential of EVs as grid assets

- Lower cost bi-directional capabilities
- Finding value for second life batteries
- EVs as mobile distribution assets

Integrated Grid Planning

THEME 1

Reduce the need for conventional capacity upgrades

- 1 PROBLEM STATEMENT
- Increase asset flexibility/thermal rating
- Improve power quality

THEME 2

Optimize prioritization and reduce costs of unavoidable capacity upgrades

- Optimize T&D buildout based on load profiles and resource flexibility
- Tools to assess assets for reusability
- Replacements using optimal tech vs. "like-for-like"

Supply & Load Management

THEME 1

Expand load management capabilities across all levels of the system

3 PROBLEM STATEMENTS

- Real-time DER-level location and usage data
- Grid-edge computing and meter socket evolution
- Automated coordination to balance supply & load

THEME 2

Deploy new clean supply and energy storage technologies

- Optimize deployment and market integration of storage assets
- Deploy new supply technologies

Wildfire

THEME 1

Improve monitoring, inspection and analysis of asset health and integrity

4 PROBLEM STATEMENTS

- Predictive structure/electric equipment failure time
- Advanced inspections and continuous monitoring

THEME 2

Eliminate ignitions with improved protection schemes

5 PROBLEM STATEMENTS

- Next gen EPSS and eliminate fault consequences
- Fail-safe design, situational awareness & response

THEME 3

Eliminate customer impacts from PSPS/EPSS

3 PROBLEM STATEMENTS

- Faster, smarter PSPS/EPSS patrols
- Micro-targeted EPSS activations
- Customer-level backup power

THEME 4

Optimize vegetation management (VM)

4 PROBLEM STATEMENTS

- Dynamic patrol frequency
- Advanced ignition risk and fire propagation inspection/modeling

THEME 5

Enhance and standardize forest management practices

- Advanced wood management
- Broader forest management capabilities

Undergrounding

THEME 1

Improve the efficiency of underground civil construction from survey to installation

3 PROBLEM STATEMENTS

- New civil construction techniques
- Advanced survey and mapping tools
- Enable longer pull lengths and simpler splicing

THEME 2

Service Drops

- Reduce cost, risk and complexity of undergrounding
- Reduce customer disruption from service upgrades or relocation
- Fire-harden service drops

EPIC BENEFITS FRAMEWORK

Benefit Area	Measurement
Reliability	Equipment service life extension
	Outage number, frequency and duration reductions
	Reduction in system and equipment failures
	Improved reliability to DAC customers
Safety	Worker safety improvement and hazard exposure reduction
	Public safety improvement and hazard exposure reduction
	Safety improvements targeted towards DAC
Environmental Benefits	Habitat area disturbance reductions
	 Reduce GHG emissions (MMTCO₂e)
	DAC Residents impacted by reduced emissions
Economic Benefits	Maintain/reduce O&M costs
	Maintain/reduce capital costs
	Peak load reduction
	Reduced cost of DER adoption
	Reduced cost of DER adoption for DAC.
	Avoided customer energy use
	Follow-on funding to projects
	Customer bill or interconnection savings
	CO ₂ equivalent savings
Effectiveness of Information Sharing	Number of industry sharing events/papers presented
	Number of times reports are cited in scientific journals and trade publications for selected projects
	Number of information sharing forums held
	Stakeholder attendance at workshops
	Results provided to standard development organizations
Adoption of EPIC Technology	• EPIC project results referenced in regulatory proceedings
	• Number of technologies/use cases demonstrated, in direct use post-EPIC
	• Number of technologies included for funding in the GRC, or for which post-EPIC funding has otherwise formally been committed
Technology Development Progress	Technology Readiness Level (TRL) Scale Assignment
Support of CPUC Proceedings or State Policy	Specific CPUC proceedings or state mandates
Informed Industry / Company Standards	Specific standards which were created or updated