



PACIFIC REGION

COMBINED HEAT & POWER
APPLICATION CENTER

Pacific Region CHP Application Center (PRAC) Network

In Partnership With:

**California Energy Commission, PIER Program
U.S. Department of Energy, Seattle Regional Office
Pacific Southwest CHP Initiative**

*DOE/CETC Workshop on Microturbine Applications
Marina Del Rey, CA. 20-22 January 2004*



Mission and Focus

- **Mission:**

- Develop Technology Application Knowledge and the Educational Infrastructure Necessary to:
 - Reduce Perceived Risks
 - Foster CHP as a Viable Option
 - Technical and Financial
 - Energy and Environmental

- **Focus:**

- Technology Transfer
- Education
- Information
- Project Assistance

- **States: California, Hawaii, Nevada**



PRAC Structure

- **Partnership:**
 - University of California – Berkeley
 - Energy and Resources Group (ERG)
 - University of California - Irvine
 - Advanced Power and Energy Program (APEP)
 - San Diego State University
 - Industrial Assessment Center (IAC)
- **Sponsorship:**
 - DOE Office of Energy Efficiency & Renewable Energy
 - Office of Distributed Energy and Electric Reliability
 - California Energy Commission
 - Public Interest Energy Research (PIER) Program
- **Technical/Program Guidance:**
 - DOE Seattle Regional Office

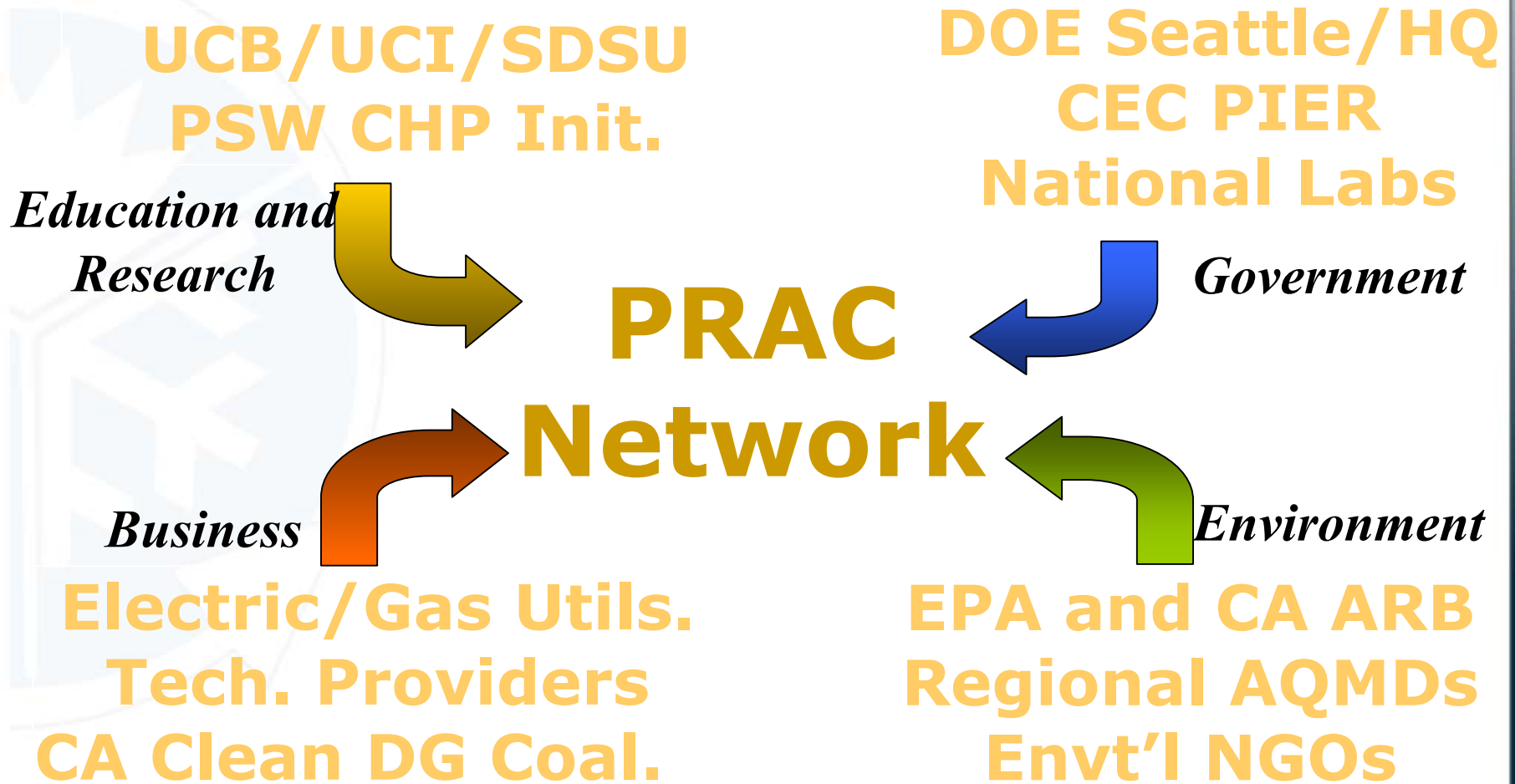


PRAC Structure

- **Initial Network Team and Partner Groups:
(In addition to CEC PIER, DOE SRO, and PSWCHPI)**
 - University of California - Berkeley (Lipman, Kammen, Farrell)
 - With: EO Lawrence Berkeley National Lab (Marnay)
 - University of California - Irvine (McDonell, Samuelsen, Brouwer)
 - With: Sempra Energy (Prietto, Becker)
 - San Diego State University (Beyene)
 - With: San Diego Regional Energy Office (Stillings)
- **Goal to Include Other PR State Energy Offices,
Universities, and Industry Groups:**
 - PG&E, UNR, UNLV, UH Manoa, etc.



PRAC Structure





Target Audience

- **End Users**
- **Architects/Engineers**
- **Building/Facility Owners/Operators**
- **State/Local Officials**
 - Energy Offices
 - Utility Commissions
 - Regulators (General Assembly)



PRAC Workplan

- **Task 1—Market Status, Education, Outreach**
 - Task 1.1 General Education and Outreach (UCI/APEP)
 - Task 1.2 State Baseline Assessments (UCB/ERG)
 - Task 1.3 Case Studies and Market Conditions (UCB/ERG)
 - Task 1.4 Outreach Information (UCI/APEP)
 - Task 1.5 Website and Database Mgt. (UCI/APEP)
 - Task 1.6 Regional CHP Coalitions (UCB/ERG)
- **Task 2—Identify and Facilitate High Impact Projects**
 - Task 2.1 Project Screening (SDSU/IAC)
 - Task 2.2 SWAT Team (SDSU/IAC)



Projected Schedule

	1/04 Jan	4/04 Apr	7/04 Jul	10/04 Oct	1/05 Jan	4/05 Apr	7+/05 Jul->	Deliverables
1.1 General E&O Activities	Ongoing activity	→	Work-Shop	→	Work-Shop	→	Work-Shop	Report
1.2 State Baseline Assessments	Initial Asses. Start		Initial Assess. Final			Revised Assess. Start	Revised Assess. Final	Report
1.3 Case Studies, Market Conditions	Compile Case Studies	Case Studies Report		Add Case Studies	Revised CS Report		→	Report
1.4 Outreach Comm. Information	Ongoing activity	→	→	→	→	→	→	Evaluation report
1.5 Website and Database Devt.	Ongoing activity	→	→	→	→	→	→	Website and DB
1.6 Coordination with Regional CHP Coalitions	Ongoing activity	Host CHP Mtg	→	→	Host CHP Mtg.	CHP mtg.	CHP mtg.	Progress report
2.1 Project Screening	Ongoing activity	→	→	→	→	→	→	Technical Report
2.2 SWAT Team	Ongoing activity	→	→	→	→	→	→	Progress Report
3.1 Coord. with State Energy Offices	Kick-off Mtg			CHP mtg.		Status Mtg	→	N/A
3.2 Reporting and Other Mgt. Reqs.		Qtr. Rpt	Qtr. Rpt	Qtr. Rpt	Ann. Rpt	Qtr. Rpt	Ann. Rpt. 9/05	N/A
4. Sustainability/Expansion Plan					Multi-Year Plan		Final MY Plan	Report



Products

- **Summary**
 - Technology Education
 - Case Studies
 - Viable Site Assessment Visits
 - Initial Screening Assessments
 - Feasibility Assessments
 - Partnership Assistance
 - SWAT Team Assistance



Status

- **Finalizing Formal Contract Mechanisms**
- **Establishing Alliances**
- **Working with National Web Content Group**
- **Working with PSWCHPI to Leverage Activity**

PSWCHPI Organizational Structure





For Further Information

- **Pacific Region CHP Application Center**
 - www.chpcenterpr.org
 - Tim Lipman - UCB/ERG: (510) 642-4501
 - Vince McDonell - UCI/APEP: (949) 824-5950 x121
 - Asfaw Beyene - SDSU/IAC: (619) 594-7143
- **Pacific Southwest CHP Initiative:**
 - www.pswchpi.org
 - Member Contact Info by Subcommittee
- **California Energy Commission:**
 - www.energy.ca.gov/pier
 - Allan Ward - PIER Program: (916) 651-6196
 - Mike Batham - PIER Program: (916) 654-4548
- **U.S. DOE – Seattle Regional Office:**
 - www.eere.energy.gov/sro
 - Chuck Collins: (206) 553-2159