



Workforce Development Council

Efrain Silva

Dean of Economic and Workforce Development

Imperial Valley College

September 13, 2024



Why Imperial Valley College?

- ASPEN institute winner - 2023 Aspen Prize for exemplary work.
- Part of the San Diego Imperial Region.
- Hispanic Serving Institution
 - o Small rural college (8000 students).
 - o Only community college in Imperial Valley.
 - o 92% Hispanic/LatinX students.
- o Challenges
 - o Consistently highest unemployment rate in the nation (currently 17%).
 - o Lowest per capita income in California.
 - o Low educational attainment.
 - o Agriculture based economy. Very low industrial footprint.



Lithium Valley



Lithium deposits identified as the largest lithium source in the world.



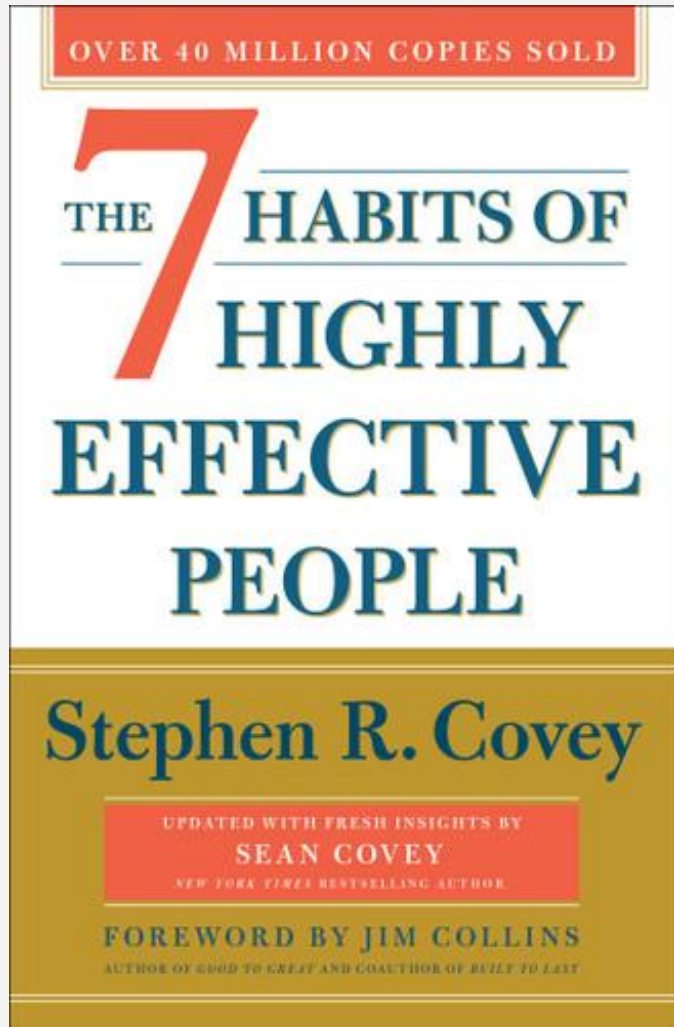
Lithium technologies being develop for environmentally safe extraction.



Lithium is vital resource for national security.

Program Development





Model after...

1. Be Proactive
2. Begin with the End In Mind
3. Put First Things First
4. Think Win-Win
5. Seek First to Understand, Then To Be Understood
6. Synergy
7. Sharpen the Saw

Habit 1: Be Proactive

- Program Development Challenges and Timing
- Lithium Companies
 - Industry input/engineering/HR Departments/technicians
- Industry experts
 - Imperial Irrigation District
 - Geothermal companies
 - Industrial operations
- Employer engagement
 - Imperial Valley Economic Development Corporation
 - Imperial County Workforce Development Board
- Faculty
 - Chemistry and Math Challenges



Habit 2: Begin with the End In Mind

- What industry requested.
 - Short-term certificate programs.
 - Curriculum that addresses their specific industry needs.
 - Significant hands-on training.
 - Internships.
 - Pathway for higher learning



Habit 3: Put First Things First

Project ATLiS Utilizing the existing geothermal plant outside of Calipatria to process lithium out of the geothermal brine deep under Imperial County.



PROJECT ATLAS CAPACITY

20,000 metric
tonnes of lithium
per year.

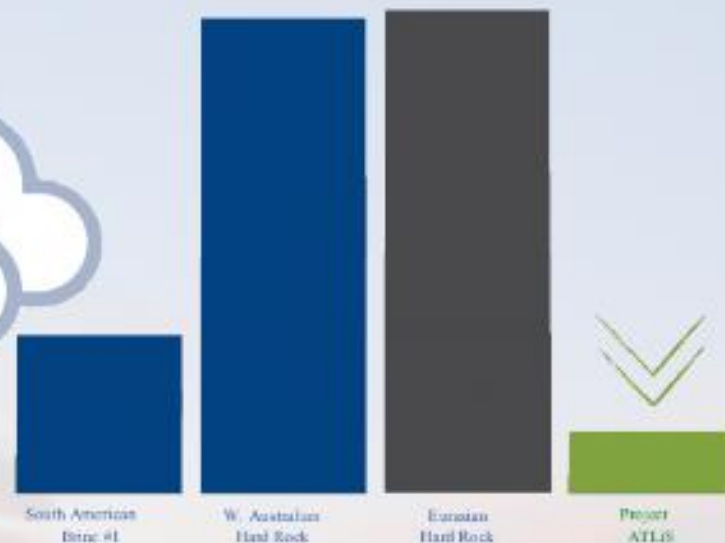
**20,000
metric tonnes
= 500,000 EV
batteries**



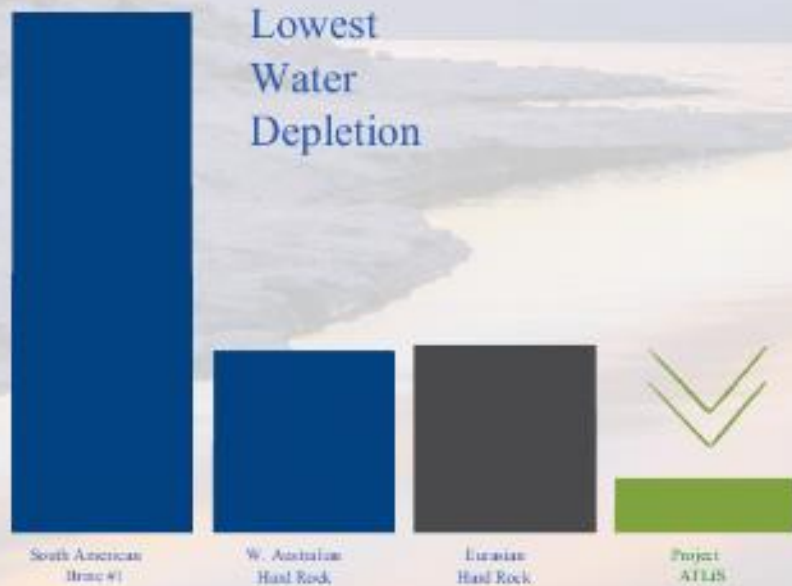
MOST ENVIRONMENTALLY SENSITIVE



Lowest CO₂ Emissions



Lowest Water Depletion



Smallest Land Use



Project ATLAS 40 acres

BENEFITS for everyone in Imperial

County

\$720 million

in tax revenue over 30 years of the project's operation

And **\$96 million** to Salton Sea Improvement



220

Total jobs



\$18M

Every year in payroll & local services



\$24M

Every year in local taxes



\$2.5M

Local infrastructure investment

WORKFORCE DEVELOPMENT + EDUCATION GOALS



HIRE AND TRAIN LOCAL

Imperial Valley
residents for
ESM jobs.



LOCAL WORKFORCE DEVELOPME NT

opportunities
through
partnerships.



EDUCATE STUDENT S

of all ages to them
to develop a
passion for STEM.



ENGAGE THE BROADER COMMUNITY

to listen and
explain benefits,
impacts and
technology.



SUPPORT ECONOMIC DEVELOPME NT

enabled by the
lithium industry.

HIRING LOCALLY

Our company has a record of hiring locally, and we intend to continue that practice.



Advertise Jobs Widespread job notices, in English and Spanish.

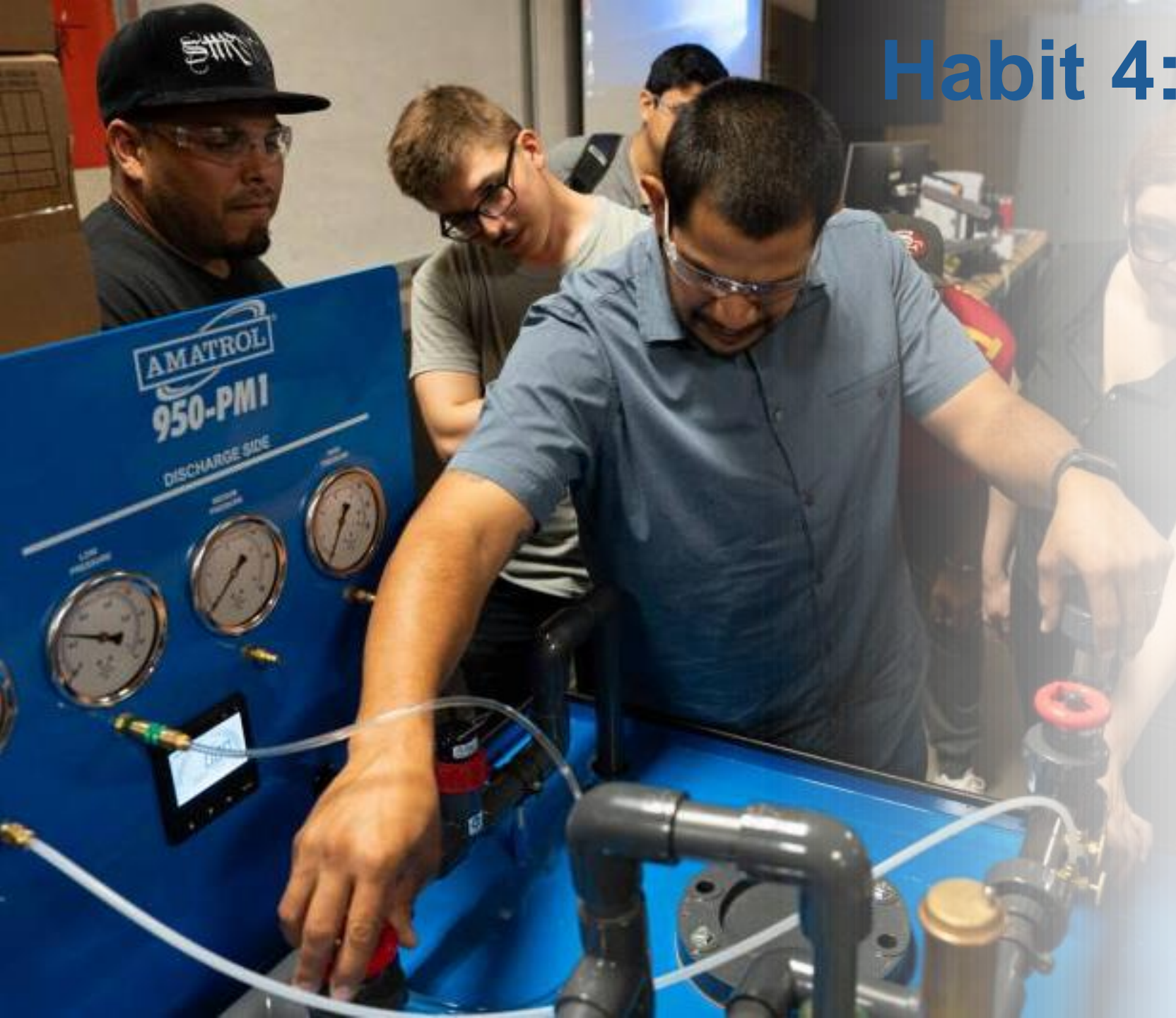


On-the-job training Career advancement and training opportunities for employees.



Applied Training for Non-Degree Seeking Workers Work with partners to develop skills training programs applicable to industry.

Habit 4: Think Win-Win



o Community wins

- o Create a prepare and train workforce to acquire new high wage/high growth jobs in lithium industry.
- o Enhance the quality of life of Imperial County residents.

o Industry wins

- o Accessibility to a prepared workforce.
- o Reduced training costs.
- o Increase retention/reduce turnover.

o Imperial Valley College wins

- o New programs.
- o Increase enrollment.
- o New facilities.
- o New Equipment.

Department of Energy Grant

- 3-year grant to develop three new lithium-related programs
 - Programs are designed to provide hands-on learning in three primary careers in the lithium industry. Our goal is to align program completers with job opportunities in the industry.
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- **Programs:**

- Plant Operator
- Chemical Lab Technician
- Instrumentation Technician

- **Funding for:**

- Faculty Coordinators
- Paid Internships
- Invest in equipment - including simulators (hands on experience)
- Additionally, we are developing a Vocational ESL component to ensure our students have the well-rounded skills necessary to enter the workforce successfully.



LIFT the Valley Programs



Each program is one year long and offers opportunities for students to earn valuable industry certifications, such as OSHA certificates and Smart Automation Certification Alliance (SACA) certificates along with their IVC certificates of Achievement .

- **Plant Operator Fall 2023** - Basic instruction in plant operations including safety (OSHA), environmental awareness (EPA) and distributed control systems.
- **Chemical Lab Technician Fall 2024** - Basic instruction in scientific methods including hypothesis development, experimentation, and data interpretation.
- **Instrumentation Technician Fall 2025**- Basic instruction in connected field devices including transmitters, valve actuators and motor controls

Plant Operator	Began Fall 2023	1st Cohort 48 Students Graduated in Spring 2024	All Completers Received Industry Certificates and IVC Certificates Spring 2024	2nd Cohort Currently Enrolled
Chemical Lab Technician	Began Fall 2024	1st Cohort 20 Students	Projected to Complete Spring 2025	2nd Cohort Fall 2025
Instrumentation Technician	Slated to Begin Fall 2025	Recruit & Enroll Spring /Summer 2025	Projected to Complete Spring 2025	2nd Cohort Fall 2026
Vocational ESL	Slated to Begin Fall 2025	Will Run Concurrently	Concurrent	Concurrent

Industry Certifications



- American Welding Society
- Automotive Service Excellence
- EPA Section 608
- Microsoft Office Specialist
- QuickBooks
- Electrical Systems
- Pneumatic Systems
- Hydraulic Systems
- Electrical Motor Control Systems
- Troubleshooting Motor Controls
- CompTIA A+
- Cisco Certified Network Associate (CCNA)
- CompTIA Security+
- Microsoft Fundamentals
- CompTIA Network+





Industry 4.0 Mass Customization

- Solutions
 - Connect new programs to industry certifications.
 - New labs under development customized to meet industry needs.
 - Resources secure
 - Strong Workforce Program
 - Perkins
 - Department of Energy Industrial Assessment Grant
 - Contextualized Learning and Industry Certifications

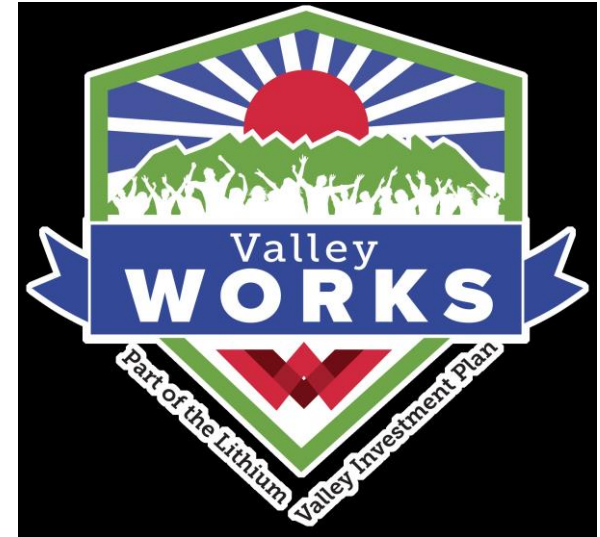


LEARNING THAT WORKS. SM



Lithium Valley Workforce and Economic
Development Needs Assessment

Habit 5: Seek First to Understand, Then To Be Understood



Initial Stakeholder Convening – July 10, 2023



ICWDB gathered stakeholders from business, labor, education, economic development, workforce development, community agencies, local government, and public agencies to collect input on:

- ❖ Community engagement
- ❖ A process to secure expert assistance in conducting the needs assessment
- ❖ Formation of a steering committee to guide these efforts

Six weeks later, we had a plan!

ICWDB reconvened stakeholders on **August 23, 2023** to review plans for:

- Composition, role, and membership of a steering committee.
- A community engagement process
- A timeline for securing expert support for the needs assessment project



Needs Assessment RFP

- Developed by the Steering Committee
 - Published on December 20, 2023
 - Bidders' Meeting on January 8, 2024
 - Proposal due on March 1, 2024
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- 13 Proposals were received in response to the RFP.
 - The Steering Committee reviewed, rated, and ranked the proposals.
 - The RAND Corporation's proposal was selected.
 - A contract with RAND was executed in May 2024.
 - RAND has initiated work on the Valley Works Workforce and Economic Development Needs Assessment Project.



RFP

REQUEST

FOR

PROPOSAL



RAND is a nonprofit, nonpartisan organization that develops solutions to public policy challenges to help make communities:

- ▶ Safer and more secure
- ▶ Healthier
- ▶ More prosperous

End Goal for Valley Works

Apr to Jun 2025



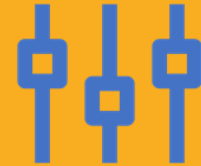
Roadmap



Actionable



Measurable



Tailored to
stakeholder
groups

Habit 6: Synergy

- Sector Projects
- Job Placement Case Management
- WBL
- Learning Communities
- Faculty/Counselor Institutes
- K16 Collaborative
- Technical Support
- Apprenticeships
- Employer Engagement
- Labor Market Reports



Habit 6: Synergy

Miguel Gutierrez

Employer Relations Liaison- IVC



Develop relationships with local employers for the Plant Operator Program

Secure letters of support for the program approval

Build out the college advisory

Secure and support 60 internships for the Plant Operator students

Habit 7: Sharpen the Saw



Continues communication with mineral extraction providers.



Industry partnerships enhance to include geothermal expansion.



Revisions on Industrial Automation And Plant Operator Programs, per industry input.



Continued membership with the IVEDC and ICWDB.



Preparing to submit application for Bachelor of Science in Industrial Automation.



New lithium lab in development phase.



THANK YOU!