resource innovations

IEPEC 2025

Evaluation in a Changing and Messy Environment
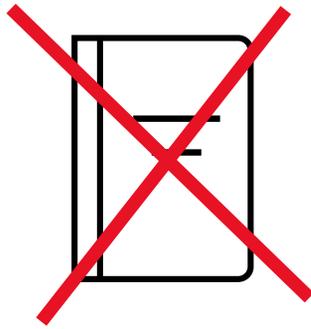
Ingo Bensch
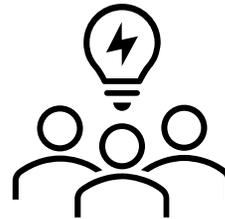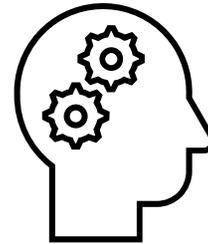
Presented at IEPEC 2025

October 6, 2025

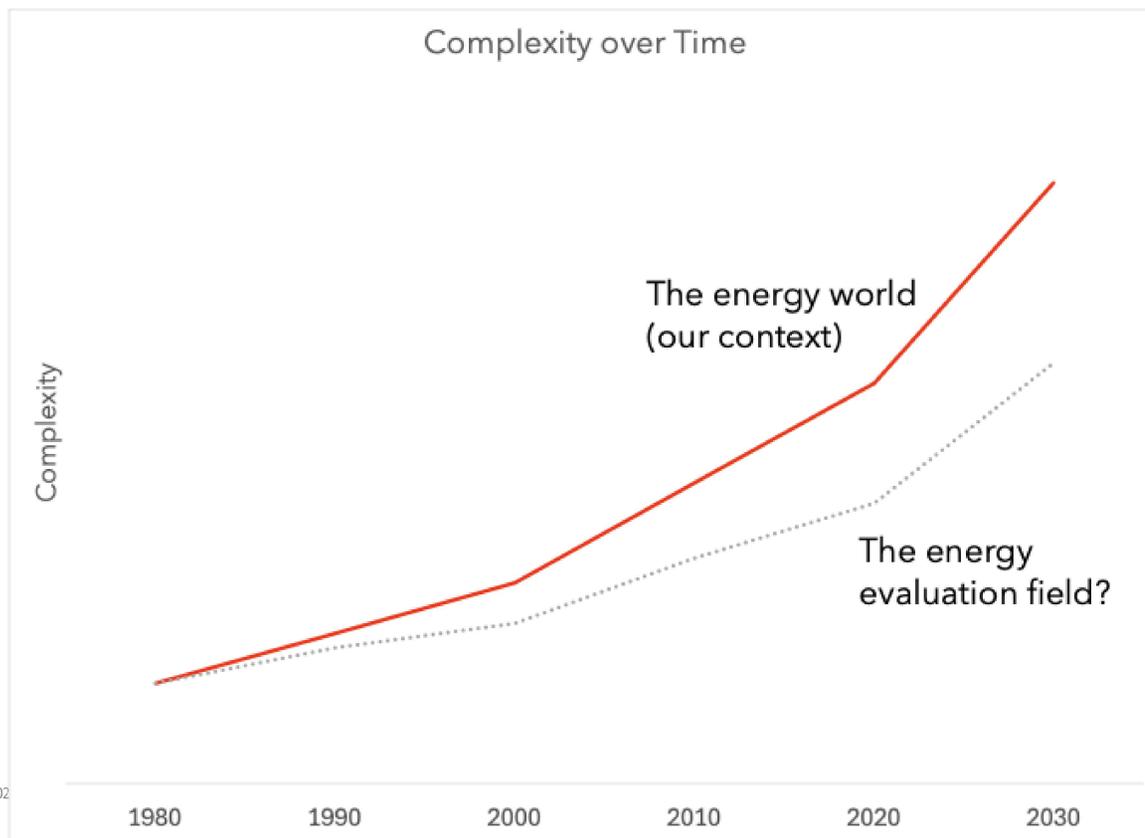# This is intended to be a **thought piece** about the future directions of energy evaluation.

There is no project, client, or report.

Just a paper intended to get us thinking about change and where we are going.

New demands and challenges for energy evaluation require us to evolve as a professional field.

Complexity over Time

The energy world (our context)

The energy evaluation field?

Complexity

1980   1990   2000   2010   2020   2030

Increased complexity in

- Industry structure
- Energy sources feeding the grid
- Policy goals driving programs
- Program goals
- Roles evaluators play on programs
- Topics evaluators are asked to address
- Topics for which evaluators could provide useful input

The plan

1 / Set the context

2 / Highlight a few challenges we face

3 / Suggest some solutions

4 / Spur dialogue and thinking
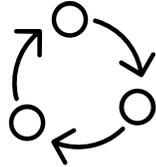
Preview (for slide readers)

Energy programs are trying to do new and different things

Programs now come with multiple policy goals

Programs are being used to contribute to complex policy needs collectively

Complex energy objectives in a changed societal landscape

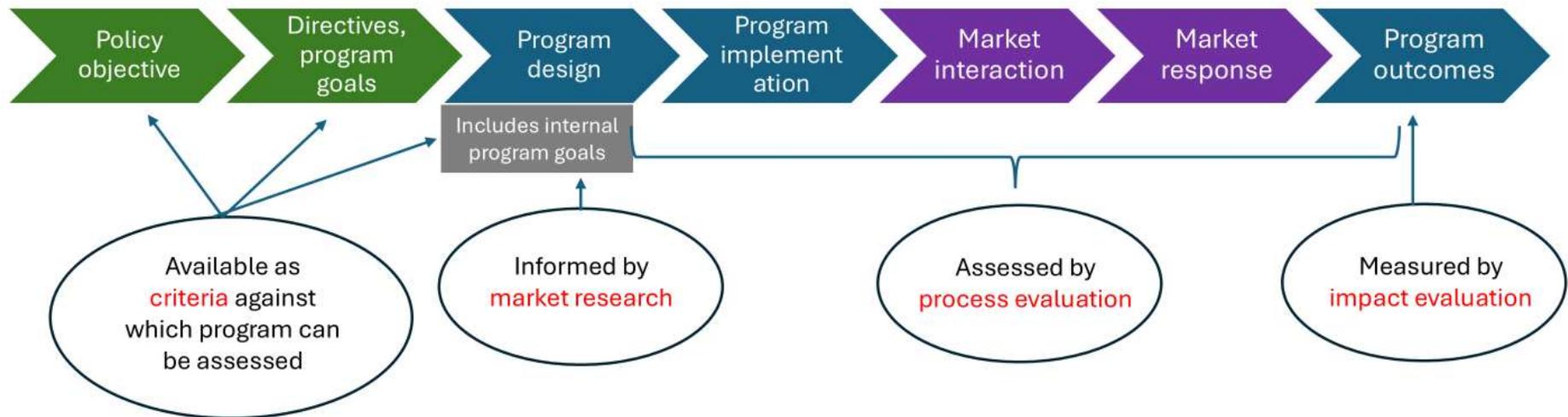# Level Setting on Evaluation (abbreviated)

Level-setting on evaluation concepts

Evidence-based inquiry that seeks to document and enhance the effectiveness of programs, initiatives, or interventions

Evaluators may serve various functions at different times: formative evaluation / market research, process evaluation, impact evaluation

Criteria against which programs are judged **are essential**

Level-setting on evaluation concepts

Tackling the policy objective IS part of evaluation

From a chart labeled Using Evidence to Improve Agency Processes. Source: OMB, 2021. Memorandum for Heads of Executive Departments and Agencies (M-21-27).
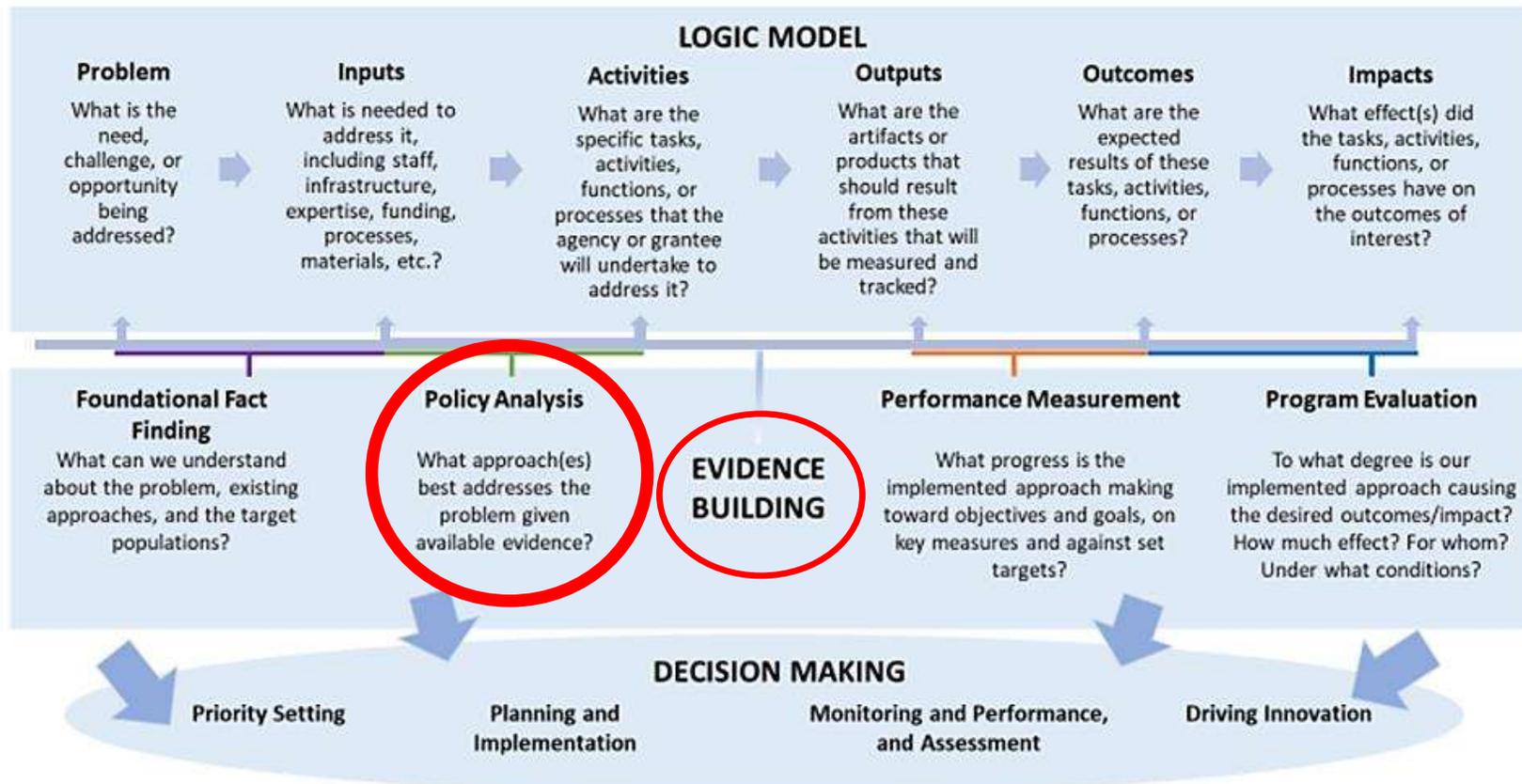
2/ Thoughts on a Few Emerging Issues and Needs

Energy programs are trying to do new and different things (and our evaluation approaches do not go far enough)
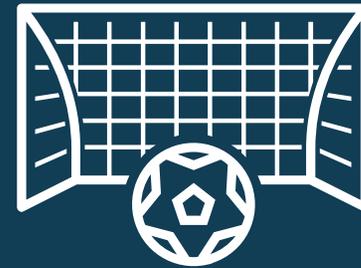
New goals

Energy programs are trying to do new and different things (and our evaluation approaches do not go far enough)

Illustrative Example: **Equity**

What we do:

Account for activity in targeted areas

What we can't / don't do well (yet):

1. **Make DACs meaningful for business programs**
2. **Account for what is program-actionable**

Our challenge:

1. **Fine-tune our use of targeted communities**
2. **Be more thoughtful about what programs can accomplish for whom**

CalEnviroScreen Scores Yuba City Area

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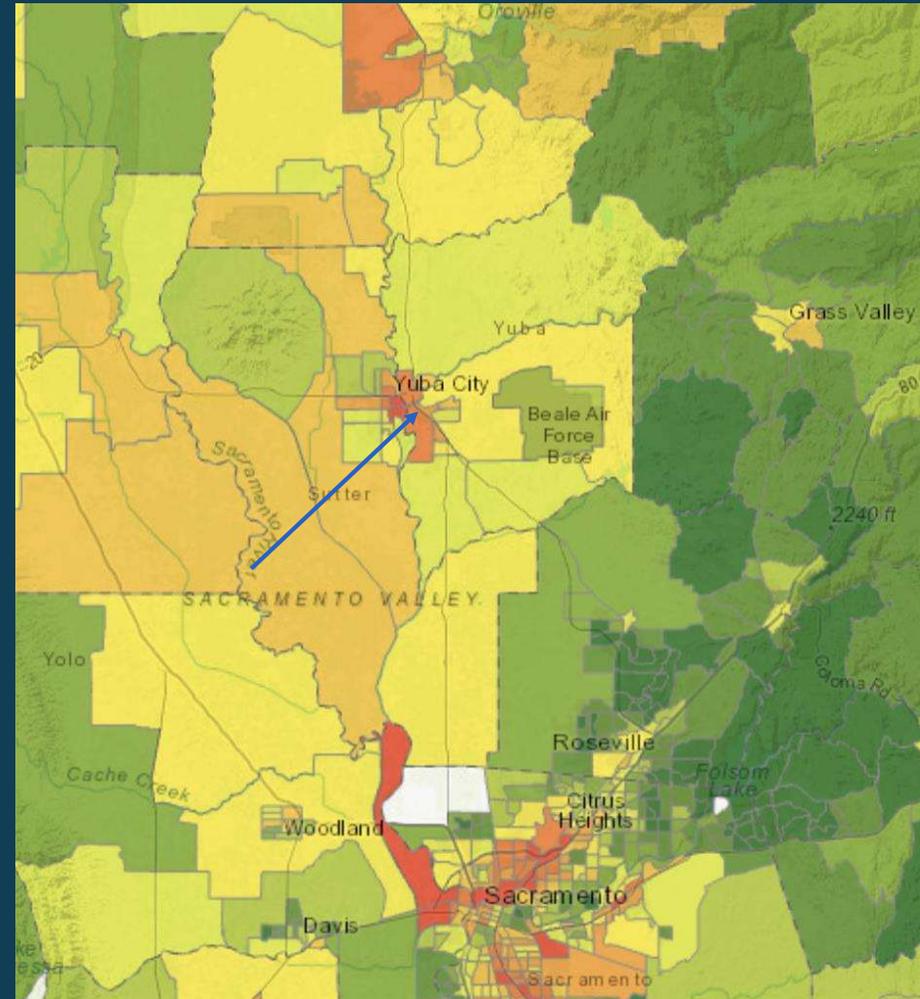
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CalEnviroScreen Scores Yuba City Area

CalEnviroScreen pct >80%
*   Pesticides (88)
*   Low birth weight (90)
*   Cardiovascular disease (95)
*   Education (88)
*   Poverty (96)
*   Unemployment (89)
(Particulate matter is only 26)

Programs now come with multiple policy goals

Which goal do you maximize?

Or do you compromise and go for a little bit of everything?

Programs now come with multiple policy goals

Illustrative Example: **Energy / Climate / Equity**

What we do: **Measure each objective**

What we can't / don't do well (yet):

1. **Communicate the trade-offs**
2. **Help programs optimize outcomes**

Our challenge:

1. **Develop metrics that communicate the trade-offs**
2. **Speak to policy makers when reporting to program administrators**
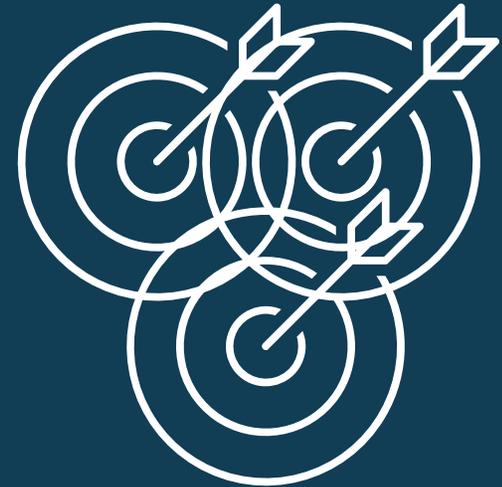
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Programs are being used to contribute to complex policy objectives collectively

Is anyone considering whether the triathlon relay team will work well together?

Team float   Team ride   Team sprint

Programs are being used to contribute to complex policy objectives collectively

Illustrative Example: **Energy Affordability / Human Needs**

What we do: **Report on a program level (siloed)**

What we can't / don't do well:

1. **Address interrelationships among energy and non-energy programs**
2. **Help policy makers understand the collective picture**

Our challenge:

1. **Investigate, measure the full human condition**
2. **Overcome siloes in programs and studies**
3. **Speak to policy makers when reporting to program administrators**

Is anyone considering whether the triathlon relay team will work well together?

Team float   Team ride   Team sprint

Complex energy objectives in a changed societal landscape

THEN

Save energy, save money

NOW

Save energy, save money

Electrify for the planet

Our device will manage your energy use for you

Use renewable energy for _____
- Self-sufficiency?
- Climate?
- Reliability?
- Savings?
- Energy independence?

Let the utility tap into your battery

Let the utility control your appliances

We want your data

Use AI

Wise energy use caught in the culture wars

Doing this for marginalized communities

Doing this for a strong America

Complex energy objectives in a changed societal landscape

The issue: **The energy ask is no longer just "get CFLs" and "turn off the lights"**

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The context: **Consider the reality that a plurality of voters checked a box that included *drill baby drill, energy dominance, no DEI***

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A possible solution: **Collaborative, big picture research to set a base understanding from which programs can operate and tailor**

National, multi-funder, multi-provider, coordinated

10/6/2025

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21

3/ Call to Action for Energy Evaluators

Call to action

Take some time to think about the bigger picture issues and needs

If you are so inclined … read the paper and reach out to discuss more

?

What are your examples of industry challenges … and opportunities?

How do you think we need to evolve?

How can we collaborate as a professional practice and as an industry?

Thank you for choosing our session!

Ingo Bensch

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Connect with me on LinkedIn