

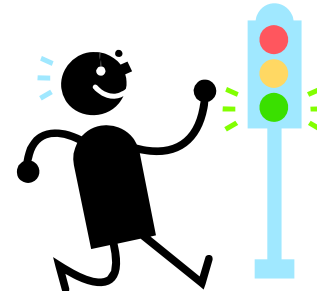
Giving The Green Light:

Streamlining Legislation & Regulation For Renewables

Representative Mina Morita

Chair, House Committee on Energy &
Environmental Protection

Renaming This Presentation



Giving The Green Light:

Clarifying Rules & Regulation

and

Streamlining & Facilitating the Permitting Process

To Implement Hawaii's Energy Strategy



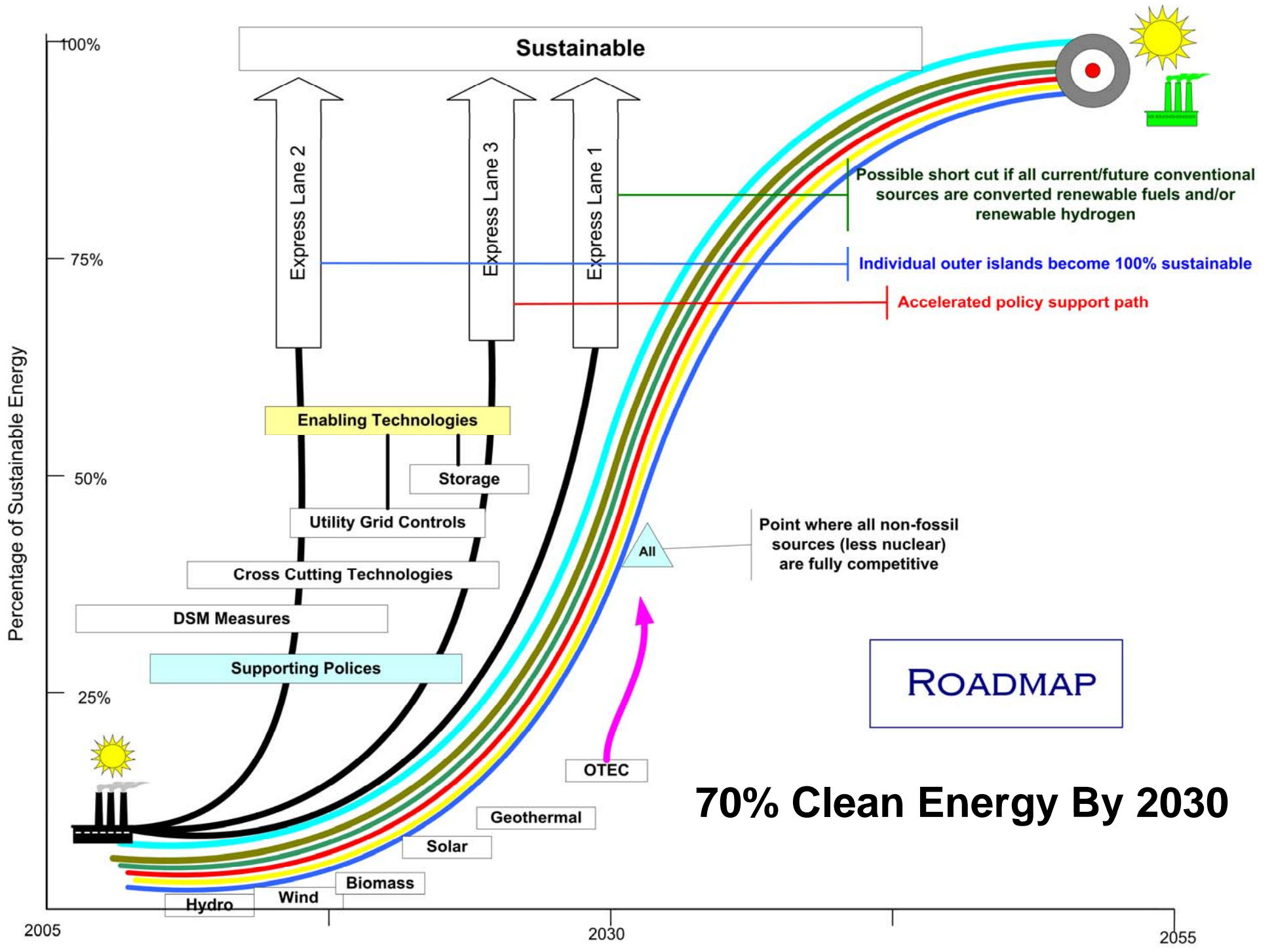
Hawaii's Clean Energy Future Are We All On-Board?

What We Know
What We Are Working On
The Challenges Of Completing The Journey

What We Know:

Where Are We Going?





70% Clean Energy By 2030

ROADMAP

Sustainable



Possible short cut if all current/future conventional sources are converted renewable fuels and/or renewable hydrogen

Individual outer islands become 100% sustainable

Accelerated policy support path

Point where all non-fossil sources (less nuclear) are fully competitive

Percentage of Sustainable Energy

2005 2030 2055

100%
75%
50%
25%

Hydro Wind Biomass

Solar

Geothermal

OTEC

DSM Measures

Supporting Polices

Cross Cutting Technologies

Utility Grid Controls

Storage

Enabling Technologies

Express Lane 2

Express Lane 3

Express Lane 1

ROADMAP



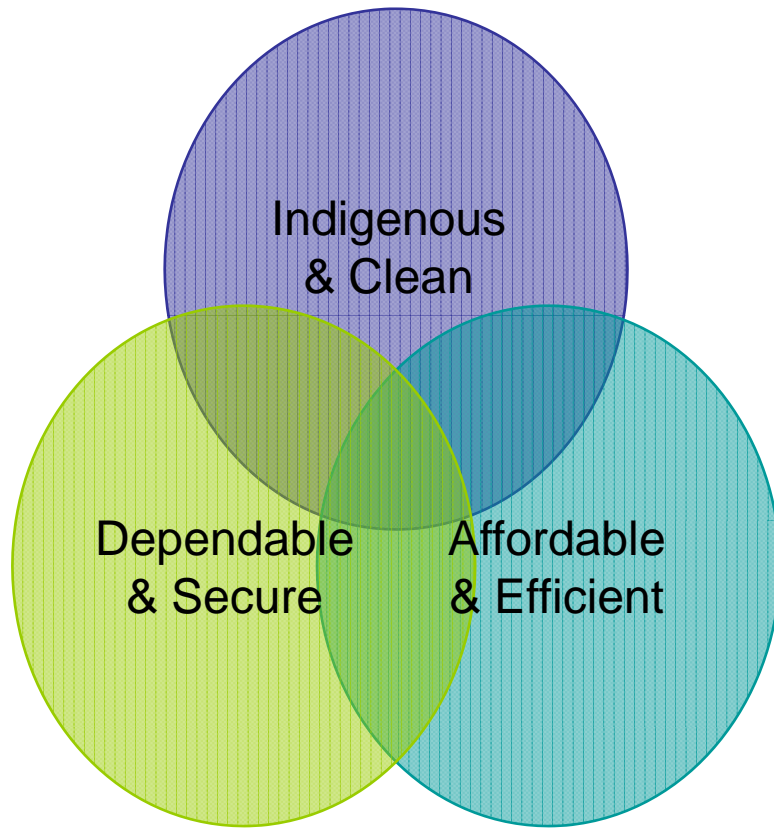
What We Know:

Why The Journey?



Hawaii's Energy Policy

Hawaii Revised Statutes, Chapter 226-18



Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all:

- **Dependable, efficient, and economical** statewide energy systems capable of supporting the needs of the people (1978);
- **Increased energy self-sufficiency** where the ratio of **indigenous** to imported energy is increased (1978);
- Greater **energy security** in the face of threats to Hawaii's energy supplies and systems (1981); and
- **Reduction, avoidance, or sequestration of greenhouse gas emissions** from energy supply and use (2000).

We strive for our final destination to meet our moral obligation to future generations for a healthy, secure and prosperous Hawaii.



Green Is The New Black



Potential Impacts of Clean Energy on Hawaii's Economy by 2020

- Displace 110 million barrels of crude oil
- Retain \$6.3 billion in Hawaii's economy (2006 oil prices)
- Eliminate 49 million tons of CO₂
- Result in 65,700 job-years of employment
- **Equivalent to stopping all flows of oil into the state for 2 years between now and 2020**

What We Continue To Work On:

How Do We Get There?



Policy Development Studies and Plans

- Hawaii Integrated Energy Assessment (1981)
- Hawaii Integrated Energy Policy Development Program (1991)
- Hawaii Energy Strategy (1995)
- Hawaii Climate Change Action Plan (1998)
- Hawaii Energy Strategy 2000 (2000)
- Hawaii Energy Strategy 2007 (in progress)
- Bioenergy Master Plan (in progress)
- Hawaii Clean Energy Initiative

Hawaii Energy Strategy

2000 Recommendations

1. New state energy objective related to climate change **(2000)**
2. Production and sale of 10% ethanol blend gasoline **(2002)**
3. Renewable portfolio standard **(2002)**
4. Public benefits fund to increase funding for DSM and renewable energy **(2006)**
5. Increase fleet use of alternative fueled vehicles **(2006)**
6. Continue state income tax credits for energy efficiency/renewable energy **(2006)**
7. Adoption of residential building model energy code in all counties
8. Expand Hawaii State Government energy performance contracting and financing for energy projects **(2006)**
9. Complete energy emergency generator inventories and database documentation for emergency and essential service facilities **(2001)**
10. Work with USDOE to provide rule-making for priority access to the US Strategic Petroleum Reserve obtained by Sen. Akaka **(2006)**

General Tactics

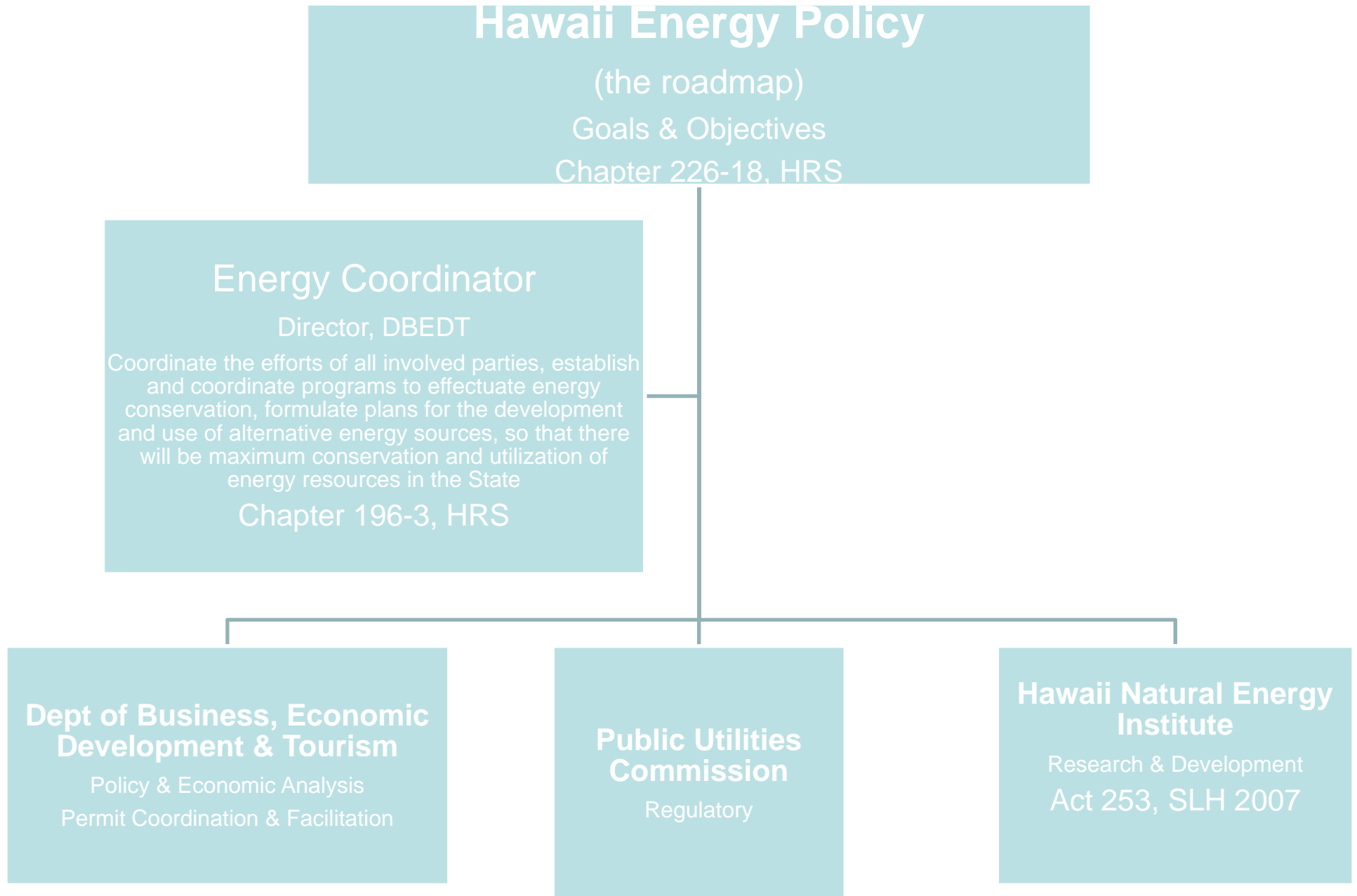
- Maximize a no-regrets strategy utilizing solar hot water, energy efficiency & conservation, easy wind
- Regulatory scheme should provide for certainty, predictability, consistency while allowing for flexibility of response
- Keep utilities healthy
- Preserve maximum flexibility for many types of business models
- Easy administration of regulations & permitting

The Challenges Of Completing The Journey:

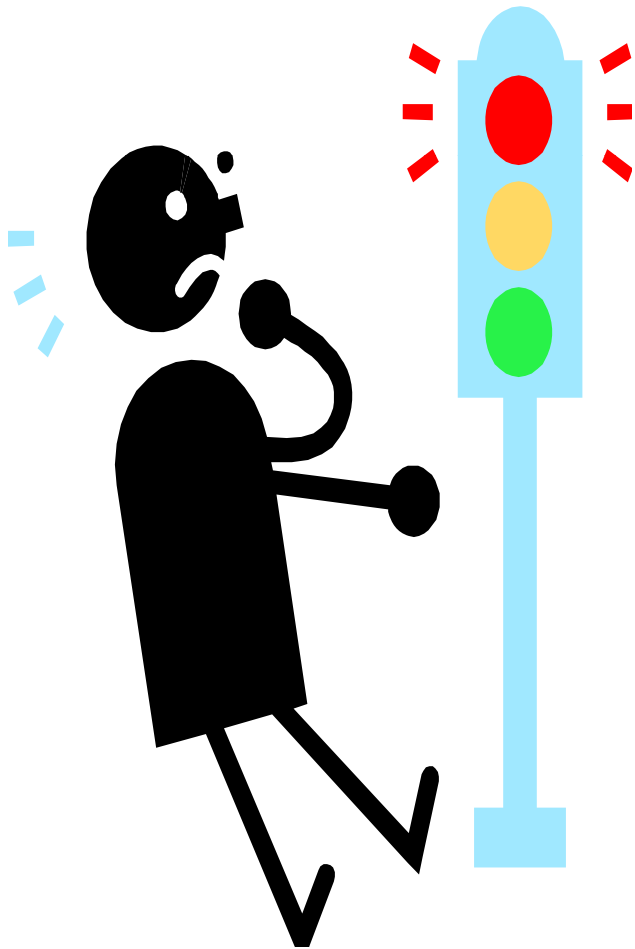
Who Is Driving The Bus?



Who will navigate and drive us to our final destination?



Running Out of Fuel



The biggest barrier the implementation of Hawaii's energy strategy will face is adequate funding for staff and other resources to carry out its objectives. However, this challenge can be mitigated by a dedicated tax on a oil to specifically fund Hawaii's energy policy.

**Hawaii's Energy Policy
Is A Long-term Strategy
Requiring Political Will, Dedicated
Funding & Resources, and
Careful Coordination**

**These are the critical components
for sailing through all the
green lights.**

