

Flightpath to Aviation Biofuels in Brazil



Case Study and Best Practices in Stakeholder-Oriented Roadmapping for Aviation Biofuels

May 2013

Lesson From Wind Energy: Altamont Pass Case and Unintended Consequences

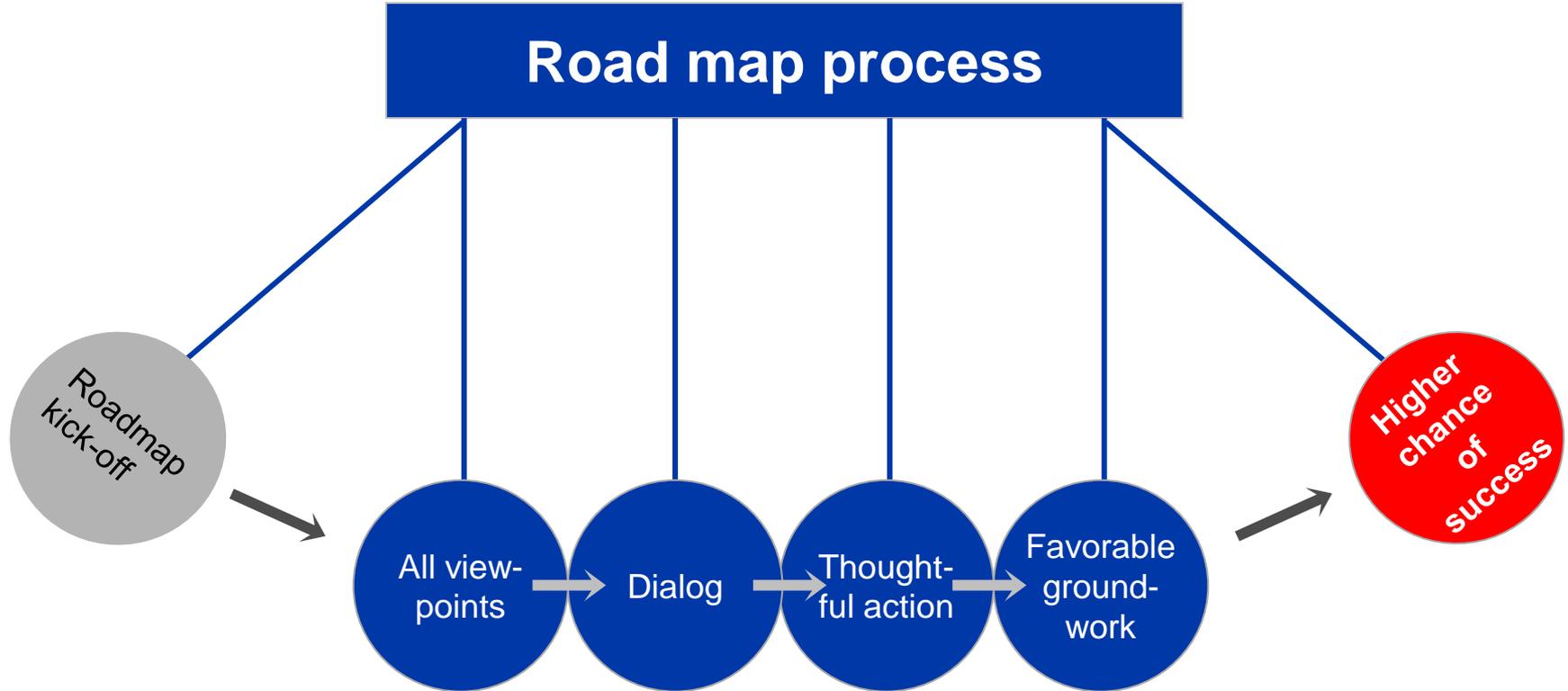


Aviation put the thinking before the doing in biofuels

Regional Approaches are Best Not One Size for All



Stakeholder-Oriented Roadmap Process



Benefits of a Stakeholder Approach to Roadmaps

1

Aligned stakeholders

- Shared vision from those in/near supply chain
- Identify most promising opportunities to limit pursuits down rabbit holes

2

Informed community

- Media involvement to inform public
- Report can be used by stakeholders to promote
 - “Drop-in” presentation content
 - Stand-alone website with report for 2+ years

3

Localized action plan

- Identify and address issues of local concern
- Understanding of local politics and tactical execution plan

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Stakeholders



The Approach of Brazil Flightpath Program

- Expertise from Stakeholders to conduct the required analysis
- Held eight (8) workshops each with a specific focus area (Facilitated by Unicamp)
- Held (3) Regional Outreaches
- Project concludes with a Public Report:
 - Identifies barriers and opportunities
 - Identifies alternative paths and actions to be pursued with respect to feedstocks, processing and delivery
 - Identifies environmental sustainability level
 - Fact based input for future research agenda, business and policy decisions
- Project results will identify/prioritize research areas and commercialization gaps to enable an aviation biofuels industry in Brazil

Workshop Focus	Location	Date	
1 – Project Overview	Sao Paulo, SP	April 25-26	✓
2 – Feedstocks	Piracicaba, SP	May 22-23	✓
3 – Refining Technologies	Campinas, SP	July 11-12	✓
4 – Sustainability	Belo Horizonte, MG	Aug 22-23	✓
5 – Policy and Incentives	Brasilia, DF	Sep 11-13	✓
6 – Logistics and Support	Rio de Janeiro, RJ	Oct 17	✓
7 – R&D and Commercialization Gaps	Sao Jose dos Campos, SP	Nov 28-29	✓
8 – Briefing to Stakeholders	Sao Paulo, SP	Dec 12	✓
Report Release	Sao Paulo, SP	Q2 2013	

Regional Outreach	Location	Date	
Central Region	Cuiaba, MT	Sep 17	✓
Northeast Region	Recife, PE	Oct 22	✓
South Region	Curitiba, PR	Nov 21	✓

Example of Desired Outcome: US Pacific Northwest Roadmap

Participation

- More than 50 diverse stakeholders



- Facilitated by non-profit Climate Solutions

Activities

- Open and honest dialog over 16 months
- Aligned stakeholders
- Consensus report published at www.safnw.com



Results

- Alaska Airlines biofuel flights
- \$80M in federal grants for local universities
- WA state biofuels legislation and support for federal action
- PNW a focus region for scale up