

Building Evidence for More Effective Policy Dialogue on AB32 Implementation

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Leading Research Gaps

1. Detailed employment impacts
2. Economics of Cap and Trade
Design Characteristics
3. Financial market failures
4. Mitigation and Adaptation



Employment Impacts

- Independent research shows that California's efficiency legacy has promoted job growth (1.5M over 1972-2006)
- Current analysis suggests AB32 will increase aggregate state employment
- Limited information is available on more detailed employment characteristics:
 - Occupations: skills/ed, new/old economy
 - Wages
 - Demographic characteristics
 - taxes/entitlements

Education (FTE jobs requiring college) Weighted AB32 Employment Effects

Tech Neutral

	Sector	Baseline	Efficiency	RCT	All
1	Agriculture	3.6	0.0	0.0	0.0
2	EnergyRes	0.7	0.0	-0.1	-0.1
3	ElectPwr	0.7	-0.2	0.0	-0.1
4	OthUtl	1.4	-0.2	0.2	0.1
5	Construction	0.9	0.0	0.0	0.0
6	Light Industr	9.5	0.1	0.0	0.0
7	OilRef	0.6	0.0	-0.1	-0.2
8	Chemica	1.7	0.0	0.0	0.0
9	Cement	0.0	0.0	0.0	0.0
10	Metals	2.8	0.1	0.0	0.0
11	Machinery	0.7	0.0	0.0	0.0
12	Semicon	1.6	0.0	0.0	0.1
13	Vehicles	1.3	0.0	0.0	0.0
14	OthInd	1.5	0.0	0.0	0.0
15	WhlRetTr	58.8	0.9	0.3	0.3
16	VehSales	1.9	0.0	0.0	0.0
17	Transport	15.7	0.1	0.2	0.3
18	FinInsREst	4.6	0.1	0.0	0.0
19	OthPrServ	237.9	2.3	-1.0	-0.8
20	PubServ	45.9	0.4	0.1	0.2
	Total	391.6	3.6	-0.4	-0.2

Innovation

	Weighted by College Education				
	Sector	Baseline	Efficiency	RCT	All
1	Agriculture	3.6	0.0	0.0	0.0
2	EnergyRes	0.7	0.0	-0.1	-0.1
3	ElectPwr	0.7	-0.2	0.0	-0.1
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16	VehSales	1.9	0.0	0.0	0.1
17	Transport	15.7	0.1	0.5	0.5
18	FinInsREst	4.6	0.0	0.0	0.0
19	OthPrServ	237.9	2.6	3.5	3.8
20	PubServ	45.9	0.4	0.5	0.7
	Total	391.6	3.8	4.9	5.1



Cap and Trade Design

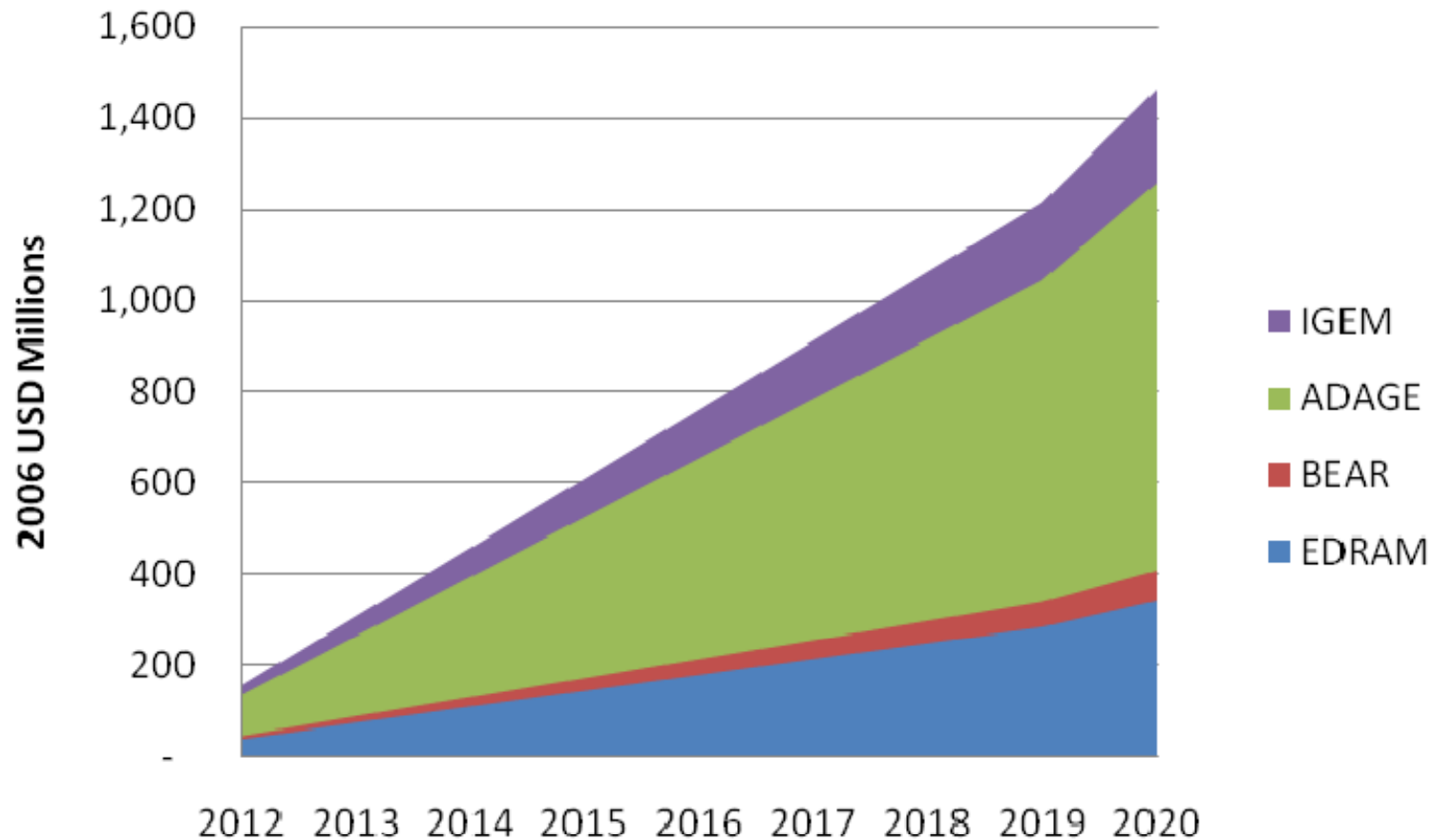
Basic question – what are the stakes and incentive properties?

Primary features/issues:

- Scope of Cap and Trade mitigation
- Allocation rules
- Offsets
- Role of trade

Permit Costs – No offsets

Assuming 34 MMT from C&T by 2020.





Financial Market Failures

AB32 will lead to extensive technology adoption.

For small enterprises and households,
this poses special financial challenges

Financial assessment is needed for a
micro-credit scheme to overcome
these barriers



Mitigation and Adaptation

- California cannot stop climate change, but it has a responsibility to protect itself
- What commitments serve both purposes?
 - Energy efficiency
 - Water management
 - Demand side management



Other Issues

- Innovation – the key to adjustment/adaptation, but still not well understood
- Renewable “integration” – vehicles, distributed incentives, storage, grid
- Public health and co-pollution – the dark side of offsets
- Integration with National policy
- Agriculture
- Revenue opportunities