

Economic and Allocation Advisory Committee

Allowance Value Provision Subcommittee

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Progress Report
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Overview of Work To Date

- Assembled and grouped alternatives for allocation of free allowance or cash from auction of allowance by function or purpose:
 - Compensation to offset direct and potentially indirect impact of AB 32 on affected businesses, workers, and consumers
 - Investment of auction revenue to advance AB 32 objectives
 - Dividends of some or all of auction revenues on an equal per capita basis
 - General Fund/Tax Relief through use of auction revenue to finance cuts in existing CA taxes or reduce future taxes by reducing CA budget deficit
- Assigned responsibility by expertise and interest to individual subcommittee members
- Analyzing available information

Overview of Work To Date (cont)

- Discussing general and relative considerations in evolving alternatives (i.e., fairness, social return, efficiency gains, timing issues, and potential legal issues)
- Beginning work on consensus on subcommittee's conclusions and recommendations
- As much as possible guided by:
 - Market Advisory Committee Report and the Scoping Plan
 - Specific objectives and requirements of AB 32

Compensation - Industry

- Compensate for the economic impact on CA businesses from the implementation of AB 32
- What industries likely to be most affected?
 - High elasticity of demand (e.g., trade exposed)
 - High intensity of carbon fuel use and high difficulty of fuel substitution
- The extent of losses to CA firms absent free provision of allowances or some other form of compensation. The magnitude of these losses depends on:
 - The cost-impact of new AB 32 regulations including Cap and Trade in given industries depends on reliance on carbon-based fuels and potential for fuel-switching
 - The ability of firms within given industries to pass through these costs depends on elasticity of demand (related to import competition) and of supply (related to mobility of physical capital)
- Electricity sector as special case?
- Relevant literature in national context but limited for CA alone
- Coordinating work on economic impact on industry with Economic Impacts Subcommittee

Compensation – Challenges to Targeting Compensation to Industry

- Need to consider both scenarios of national/regional Cap and Trade and of CA alone
- Market has already made assessment of AB 32 impact on publically owned businesses – affected shareholders may no longer own an interest. In addition, many shareholders will be from out of state diluting economic benefit of payments to Californians
- Would compensation to shareholders be a taxable event?
- Should we focus on assisting transition rather than on compensation?
- Are small businesses differentially affected relative to larger businesses?

Compensation – Low Income Households

- Households will have higher costs directly for electricity, natural gas, and gasoline, and indirectly as businesses pass costs for GHG reduction on to consumers
- Can be expected to have a regressive impact
- We do not want to negate the impact of the newly introduced price signals by subsidizing energy use
- ACES (Waxman-Markey bill) allocates 15% of allowance value to relief for low-income households

Compensation – Displaced Workers

- Compensation for CA workers who lose jobs as a direct result of AB 32 GHG reduction plans
- Federal Trade Adjustment Assistance provides possible model
- Benefits could include cash transition payments or investments in training, job search assistance and relocation allowances
- Unclear what the extent of worker displacement might be

Dividend

- Direct refund of some or all auction revenues on an equal per capita basis to the public (so called “Cap and Dividend”)
- Rationale:
 - Allow all to share equally in the ownership of this recently created property right
 - Build durable public support for carbon policy through simple equitable and transparent return of revenue
 - Protection of household real income affected by higher fossil fuel prices resulting from the cap - preliminary work to date indicates the net impact of Cap and Dividend is distributionally progressive
 - Taxability of dividends - would have further progressive effect

Dividend

- Precedents:
 - Alaska Permanent Fund: distributes state oil revenues in equal per person dividends
 - ACES (Waxman-Markey bill) Climate Change Consumer Refund Account allocates about 50% of allowance value to equal per person tax refunds in the final two decades of the policy

Investment

- Investment of revenue from auction of allocation to address broad range of objectives included in AB 32
- Why make investments?
 - Key rationale: address market inefficiencies (e.g., energy efficiency investments or funding of basic research)
 - Encourage early action (e.g., fund an ITC)
- How compare investments?
 - Addressing key objectives of AB 32 (e.g., being equitable, promoting innovative and pioneering technologies, etc.)

Investment

- What should the process be for investing allowance value?
 - Where possible use existing institutions (e.g., CA Energy Commission Research Development and Demonstration division)

Investment – Support of GHG Reduction Solutions

- Investment of revenue in GHG reduction solutions such as energy efficiency, renewable energy, RD&D, smart growth, smart grid, etc.
- Address market inefficiencies including:
 - Split incentives
 - Lack of information
 - Lack of access to capital and/or unreasonably high personal discount rates
- When comparing alternatives:
 - Reference array of AB 32 objectives recognizing that many are qualitative
 - An overriding imperative is cost-effectiveness (see McKinsey comparative cost analysis as an instructive example)
- Relevant existing institutions that could oversee revenue allocated to these investments include:
 - Public Interest Energy Research (PIER)
 - California Technology Investment Partnership
 - Center on Energy Efficiency (UC Davis)
 - Institute for Energy Efficiency (US Santa Barbara)

Investment in Job Training

- Rationale:
 - Enables firms investing in California's new green economy to hire workers with appropriate skills
- Do job training programs pay? Who benefits?
 - Trainees usually benefit through higher earnings
 - Also, state receives higher (income & sales) tax revenues and makes lower income support payments
- Results of studies carried out by other states:
 - Generally positive returns (i.e., benefits > costs)
 - However, their magnitude varies with methodology
 - Generally, higher returns for female trainees vs. males
 - Generally, higher returns for technical training (math, science, quantitative methods, etc.) vs. liberal arts
 - Generally, lower costs for re-training current employees vs. inexperienced new hires

Investment in Job Training

- Several models exist at present:
 - Employers identify skills and training required, share training costs (similar to California Employment Training Panel)
 - Workers seek assistance in finding green jobs (similar to CA & local Workforce Investment Boards)
 - Community colleges & private-sector schools identify green occupations and develop appropriate training programs (sometimes in partnership with hiring business firms)

Investment – Disadvantaged Communities

- AB 32 provisions
 - ARB shall consider “direct, indirect, and cumulative impacts from these mechanisms, including localized impacts in communities that are already adversely impacted by air pollution.”
 - ARB shall ensure that GHG reduction policies “where applicable and to the extent feasible, direct public and private investment toward the most disadvantaged communities in California and provide an opportunity for small businesses, schools, affordable housing associations, and other community institutions to participate in and benefit from California efforts to reduce greenhouse gas emissions.”

Investment – Disadvantaged Communities

- General considerations:
 - Fairness: some communities are overburdened by cumulative pollution impacts
 - Efficiency: maximize net benefits including health benefits from AB 32 implementation
 - Environmental: substantial co-pollutants generated by production and use of fossil fuels
- Policy options
 - Allocate some fraction of allowance value to Community Benefit Funds (CBFs)
 - Introduce a co-pollutant surcharge with proceeds to CBFs
 - Establish zonal trading system to guarantee emission reductions in over burdened locations

Tax Relief and General Fund

- Sending auction revenue to CA General Fund to offset tax revenue lost due to specific tax reductions or for general, unspecified governmental use.
Alternative tax changes could:
 - Compensate affected industries
 - Encourage business to take actions furthering the goals of AB 32 (e.g., energy efficiency investment tax credit)
 - Provide general tax relief to business and/or individuals affected by the general increase in costs in California as the impact of AB 32 filters through the economy
 - Provide new revenue stream for CA Treasury

Tax Relief and General Fund

- Considerations:
 - Addressing current budget deficit reduces intergenerational inequity
 - Shifting taxes from income and sales to carbon reduces distortionary impact of these taxes and thereby increases economic efficiency and expands overall income
 - Address issue of general CA business competitiveness
 - Shouldn't legislature be making decisions on the margin between, for example, funding a new GHG reduction effort or spending on State parks?