Addressing the Upfront Cost Barrier: States Invest in Finance Policy this Session

The single greatest obstacle to advanced energy deployment in the United States may be access to quality financing. Arguably, the utility industry itself is a time-tested financial model that allows for the deployment of low-cost capital toward substantial investments in generation, transmission, and pipelines, amortized over decades and across millions of bill payers. In order to truly level the playing field, distributed supply and demand-side resources will also require access to financial mechanisms that overcome up-front cost barriers through amortization.

In the 2013 legislative session, it would appear that states have recognized that financing is a critical element in growing a new energy economy. More than 550 advanced energy financing and incentive bills have been introduced in state legislatures to date. In fact, this category of legislation accounts for nearly a quarter of all advanced energy-related policies proposed this year. The Center for the New Energy Economy has categorized these financing and tax incentive proposals by policy type in Figure 1, below.

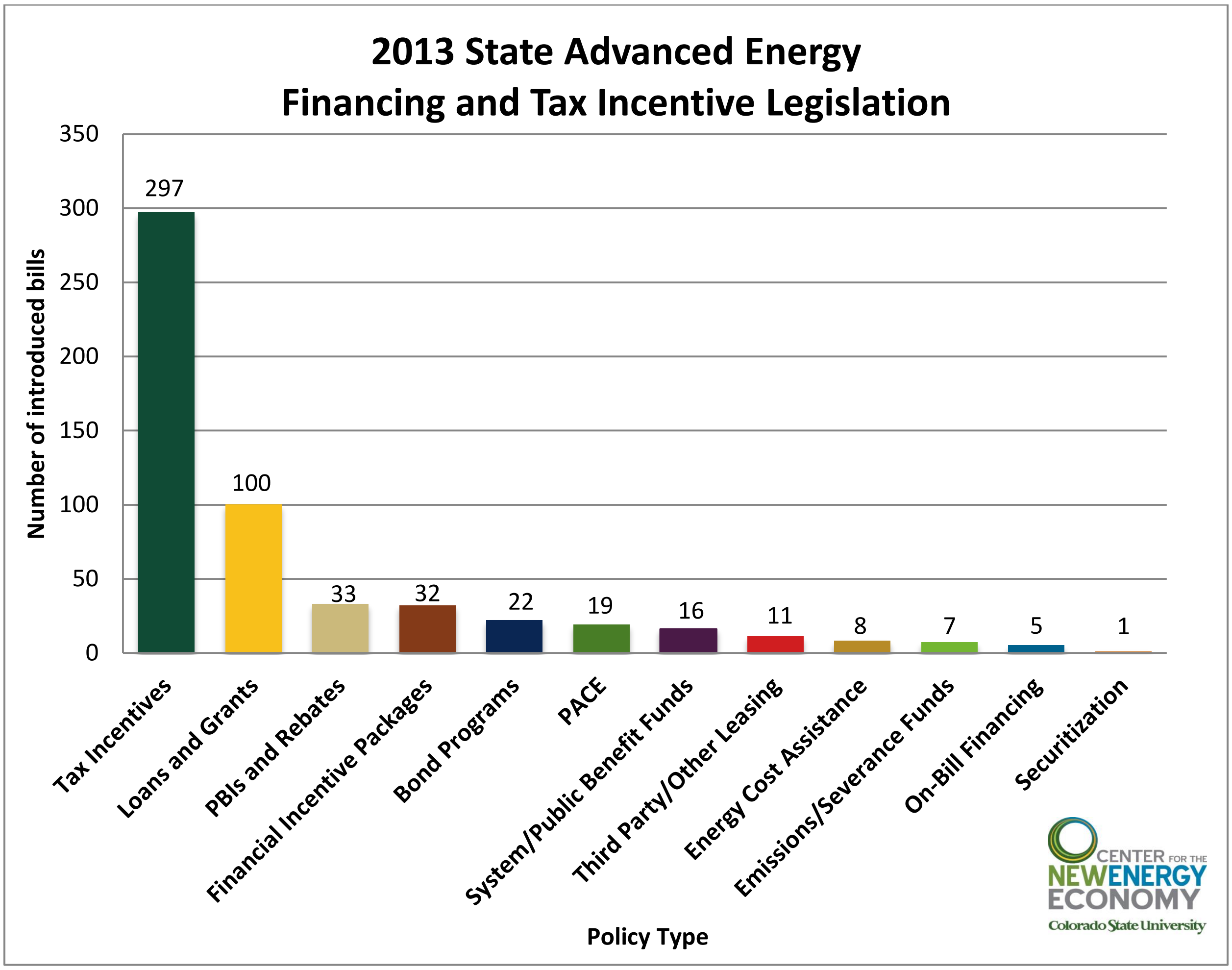

Figure 1. Financial incentives account for 551 of more than 2,200 bills introduced as of May 5, 2013, and archived in the Center for the New Energy Economy's *Advanced Energy Legislation Tracker* database. AELtracker.org.

The first clear trend is that the majority of introduced legislation promotes some form of tax incentive for the purchase of advanced energy technologies. Breaking these tax incentive bills into their target industry sectors yields the distribution in Figure 2, below.

     Source: Advanced Energy Legislation Tracker database

Tax incentive proposals addressing investment in electricity generation dominate, with the majority emphasizing solar technologies. Lawmakers were also active this session promoting transportation-related incentives to increase fuel efficiency and the use of alternative fueled vehicles. It is important to note that while these tax incentives reduce the overall cost of investments, they do not address the critical up-front cost barrier. The remaining financing bills, outlined in Figure 1, in one way or another reduce up-front costs to the participant. It is within this class of legislation that we find the most innovative trends in financing policy.

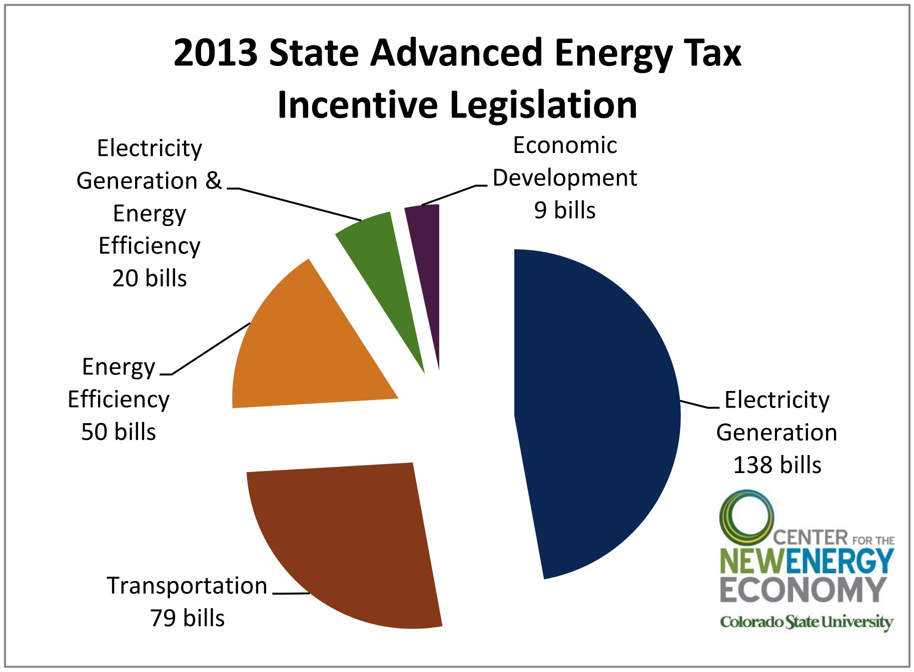

Figure 2. A breakdown of introduced tax incentives bills (297 total) by target sector.

Loan and grant programs are the biggest single category of true financing legislation proposed this session. Financial incentives packages and performance-based incentives also appear to be popular. Incentive package proposals generally include a combination of tax incentives, new loan and grant programs, and performance-based incentive programs, particularly for electricity generation. The performance-based incentives and rebate programs tend to emphasize production of electricity, paid per kilowatt-hour of energy produced by wind and solar resources; or per-gallon incentives in the case of alternative transportation fuels. Finally, the bond programs category is best characterized by authorizations to local governments to fund clean energy projects.

Many of the remaining categories represent cutting edge policy proposals directed at improving access to consumer financing. These include PACE (property-assessed clean energy) programs, the collection of system/public benefit funds, on-bill financing, and third-party leasing proposals. Modifications to, expansions, and in some cases, new provisions for PACE programs were fairly common. On-bill financing through utility bills also appeared to gain a better foothold this session. Both PACE and on-bill financing are particularly attractive policies in that they build upon existing collection mechanisms – property taxes and utility bills respectively. Finally, legislation expanding third-party leasing is an elegant solution to a number of problems related to monetizing federal tax incentives, eliminating system maintenance concerns for the consumer and solving the up-front cost barrier.

In conclusion, the Center for the New Energy Economy has identified three takeaways relevant to financing and tax incentive legislation introduced in all 50 states in the 2013 session:

1. Tax incentive proposals dominate the field with nearly 300 introduced bills this session, with the majority providing solar and transportation tax credits. While these measures lower the overall costs of a given technology, it is important to clarify that they are not true financing solutions.
2. Loans and grants and performance-based incentives are the second most common set of bills, after tax incentives. These policies represent better financing mechanisms than tax incentives alone, though they rely on public funding streams that often must be maintained in order to continue.
3. PACE, on-bill financing, third party leasing, and securitization proposals are the least prevalent types of financing legislation, yet these policies hold the greatest promise for revolutionizing our energy economy in that they tend to be revenue-neutral, leverage existing billing systems, and enable the greatest consumer participation levels.

 Source: Advanced Energy Legislation Tracker database