

Renewable Advisory Council Discussion Document Revised Green Tag Policy Option

Summary

With the growth of the voluntary market for green tags and the development of policy changes offering project developers more options for selling their tags, the current green tag policy has been out of synch with market circumstance. Increasingly, our claims on project green tags are a source of contention with project sponsors. In recent experience staff has also found that the strict application of the policy can be at odds with a broader development of an industry.

As part of our strategic planning process, the Board asked us to more fully define the issues and propose **possible** changes to the current policy to address the issues. This paper outlines the issues and proposes possible alternative approaches. Staff seeks feedback on the issues and the possible solutions.

Background

A green tag can be defined as the environmental benefits from the electricity generated by a renewable energy project. Typically, these benefits are measured as the avoided air pollution from an alternative, fossil-fueled source of generation.¹

Green tags can be sold or traded. Green tags are a recognized financial instrument, and the sale of tags can be an important source of project financing and profit. The owner of the tags retains the right to claim the positive environmental benefits of the generation from the renewable resource. While a renewable project may still be renewable, its owner cannot claim to have or provide environmental benefits unless they also own the tags.

Under SBI 149, the public purpose funds for renewable energy are intended to defray the above-market cost of certain renewable resources. The funding is restricted to new projects or to a new addition to an existing project, and further restricted to particular types of resources. SBI 149 does not mention green tags.

Business approach

Energy Trust has developed strategies to foster the development of new renewable energy projects based on varying market approaches, technologies and resource types. Each program is guided by a market strategy that ranges from complex efforts to transform the market, to simple efforts to acquire projects through cost buy-downs. Most programs include a range of graduated approaches.

¹ The unit of measure is a megawatt- or kilowatt-hour.

We have programs specifically directed at biomass, solar and wind. Collectively these resources represent more than 90% of all the untapped potential in eligible renewable energy in Oregon. We also have a program to acquire least-cost, large projects through the utilities, and one to capture market-changing ideas. Efforts with the utilities presently focus on large wind projects because they are the cheapest renewable option in today's market.

We have considered efforts to transform markets to be valuable even if they do not immediately or directly result in projects or securing green tags. We share the cost of feasibility and resource studies to build knowledge and information for others and build a pipeline of projects. In other instances, we have publicized funding sources and helped projects secure grants. We have also have provided 'insurance' for projects, holding funds for them in case they need them for financial viability.

Current Green Tag Policy

The current green tag policy was adopted as an add-on to SB 1149's direction to fund the 'above-market costs of new renewables.' The policy was developed after a year-long discussion with stakeholders and the board. It is linked to the policy defining the methodologies and processes used to calculate above-market costs.

Our policy requires that for each renewable energy project Energy Trust funds, we must secure for ratepayers an amount of green tags proportional to our share of that project's above-market costs. By implication, the policy defines the value of the tags as no more and no less than the project's above-market cost. The policy allows the project to retain tags in the near term to defray above-market costs, but in that instance we would reduce the financial support we offered by the amount received by the project from the green tag sales.

Per the policy, under certain circumstances Energy Trust can sell the green tags it retains. At present all the tags we retain are held in trust for the ratepayer and retired by the Energy Trust or by others on behalf of the ratepayer. We have agreed that OPUC can have a say in the disposition of the tags from large-scale projects done with the utilities, provided the ratepayer fully benefits.

Energy Trust's green tag policy recognizes that future regulations and policies may give more value to the environmental attributes of renewable energy. For instance, the renewable portfolio standard under discussions in Oregon allows utilities to meet some of their obligation with green tags. To protect ratepayers from the future cost of that obligation, the Energy Trust policy secures tags in advance of the future need.

Issues

There are two broad issues facing the renewable energy program with green tags:

- Competition. When Energy Trust adopted the current policy, the voluntary market in green energy in the Northwest was one-third of its current size, and only Texas had a renewable portfolio standard (RPS). Today, over 20 states

have varying forms of an RPS and more than 100,000 individuals and businesses in the Northwest voluntarily purchase renewable energy through their utility.

The green tag is a key component of compliance in both the voluntary and the mandatory markets.² It is possible to sell tags from Oregon to anywhere. Consequently there is growing competition for those tags. Because competition means that developers have more options, it has real impacts on our programs, and also implications for the future availability of resources to meet Oregon's own RPS, should the Legislature adopt one.

- Value. A green tag exists based on the generation from a renewable energy project. The market defines a value for tags based on demand and supply. Our policy assertion that the green tag value is related to our above-market funding is arbitrary and no longer realistic. The valuation of a green tag is separately influenced and we have no flexibility to recognize this or incorporate it into the long-term incentive structure for support from Energy Trust.

Problem Statements

Staff see the following consequences from the current policy:

I. Lower long-term value for the ratepayer. In a RPS world, it may be the best value for Oregon's ratepayers in the long term to secure more tags now, even if we do not get our 'full share.' In the growing competition for green tags, we may be foregoing relatively cheap opportunities now by insisting on all of a project's tags in return for covering its above-market costs.

For instance, recently we were unable to reach agreement with two biomass projects, totaling 13 MW, as a result of our current green tag policy. Instead we choose a 1.2-MW project that could conform to our policy. We paid relatively more for the consequent green tags, at a levelized rate of \$16/MWh.

The first two projects, above, had above-market costs equal to a levelized cost of about \$4/MWh, if Energy Trust paid 100% of the above-market costs. These projects asked for the full above-market costs along with a quarter to half of the green tags. They argued this provided better incentives to perform, giving them a potentially greater upside for the long-term. Since this violated the strict policy of sharing in proportion to the above-market funding, negotiations were curtailed.

² California has a RPS and Washington State voters have approved an RPS. The Washington RPS allows green tags from projects in Oregon and elsewhere in the Northwest to be used to comply. California is considering the same, and in the meantime California utilities are signing power purchase agreements with Oregon renewable energy projects. The wind developer PPM is building a project without a long-term power purchase agreement with the ability to leverage the California market.

The offer of sharing half of the tags for 100% of the above-market costs would have provided tags at \$8/MWh. This would have delivered green tags to Energy Trust at half of the cost of the tags we did purchase. As we increasingly face a market defined by the RPS, the current policy may run counter to the long-term interests of ratepayers by having us purchase at higher rates or to let less expensive tags go out of state.

2. Less project development. As the green tag market and RPS policies further evolve, the green tag policy may narrow Energy Trust to smaller projects or those furthest from market viability – that is, those for which green tag values are much less than above-market costs.

To develop effective markets in renewable technologies, more project activity is needed to attract the types of supporting services, vendors and suppliers necessary to create a viable alternative energy sector. More activity helps lower costs and allows us to spread our funds further. Spending more on fewer projects does not help drive a developing market as fast as could be done.

It may be a continual strategy by Energy Trust to always move to the next technology further out on the curve. If so, this it would be more effective to be intentional and explicit with appropriately designed programs.

3. Market Relevance. The current policy can imply to those with potentially good projects that we are not the place for them. The inability to make a compelling offer turns away prospective customers and makes us less relevant. It may be easy to tell good projects to go elsewhere, but such a stance has a cost in public credibility.

Oregon projects do want to work with us, because it helps lower their transaction costs and creates an underpinning of certainty. Partnerships are seen as valuable. We can bring a measure of credibility that gets the attention of vendors and financiers. But, at the same time, we are perceived as capping all the upside, providing only sticks for non-performance and few carrots for high performance. The future value of the green tag market can provide that incentive, if we are willing to share some of the up-side.

Options for Policy Revision

There are a range of responses to the issue raised. Obviously, no change is a rational response. Continuing the current policy will drive us to be the provider for the smaller, most expensive projects. Renewable energy goals would need to be lowered and some programs revised a little to re-target markets. This is not likely to be in synch with the RPS needs of the state.

Aside from no action, staff see two other directions we can take:

1. Minimize. It has long been argued that our ownership share should be based on the total project costs and not the above-market portion. Instead, we have held to a position that we base our view on the leverage we provide.

If we compared our incentive to total project costs we would take far less green tags from any project. For large wind our green tag share would drop from 100% to less than 5%. For solar it would drop from 75-90% to 20-30%. By claiming less we would lower the point of friction with project sponsors. However, this policy option would produce less value for ratepayers.

2. Define a new methodology. The new approach would separate the above-market cost calculation from the green tag acquisition. We would use green tags as a tool to make compelling offers when we can secure comparatively cheap tags. The balance would be between developing projects and securing direct environmental benefits (green tags).

To satisfy the above, the policy could be modified to allow greater sharing of tags, if the net present, levelized value of the green tags in the market is greater than the green tag value derived from the above-market offer from the Energy. This balance would have to recognize the structure of an Energy Trust offer compared to revenue uncertainties over time for green tags.

How could the above work easily? Staff have worked this issue for several months and after many iterations believe the following is the clearest and simplest way to proceed in a changed policy:

First, Energy Trust would have to define a referent price for the green tags. This would require periodic surveys of the market (most likely using an independent third party or broker) The referent price may need to be done for a range of technologies. It could also entail selling tags to ensure quotes are real.

Second, where a project's above-market cost is less than the value of the tags based on the referent price, Energy Trust would claim only as much green tags as its financial incentive would buy on the market. In practice there may need to be controls on minimum share for the ratepayers or other safety valves.

Consider the following **example**: Project C, a 10-megawatt wind project, will generate 400,000 MWh over its expected operating life. Not counting any value for green tags, the project is \$1,000,000 above market. Energy Trust's latest review of tag prices indicates a market value of \$4.00 per MWh for wind tags, or \$1,600,000 for Project C.

Under the above policy, Energy Trust would offer to pay full above-market cost, or \$1,000,000. In return, we would acquire 250,000 green tags over the life of the project (that is, \$1,000,000 divided by \$4.00), or 62.5% of the tags in any given year. The project would retain the rest of the tags.

The key difference between the current and this examples is that the current policy requires direct equivalence between the fraction of the project's above-market cost covered by Energy Trust, and the proportion of the project's tags received by Energy Trust. In contrast, the above acknowledges current green tag values are set by the market, and that Energy Trust cannot determine them by fiat.

Under this modification, the advantage to the developer is that they receive an incentive sufficient to finance the project. They also, effectively, get a price floor for the green tag revenues. The advantages to the Energy Trust are:

- the project is built, adding to market growth,
- Oregon ratepayers secure rights a significant quantity of tags at a reasonable price, and
- the project has an additional, long-term positive incentive to maximize generation.

Next Steps

Staff have been engaged with Energy Trust's Policy Committee to define the issues and possible approaches. Staff and the Committee are interested in comments and feedback from the RAC to help define a preferred solution.