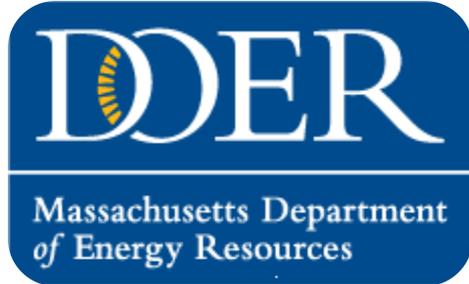


Creating A Cleaner Energy Future For the Commonwealth



Energy & Climate Science Education Initiative

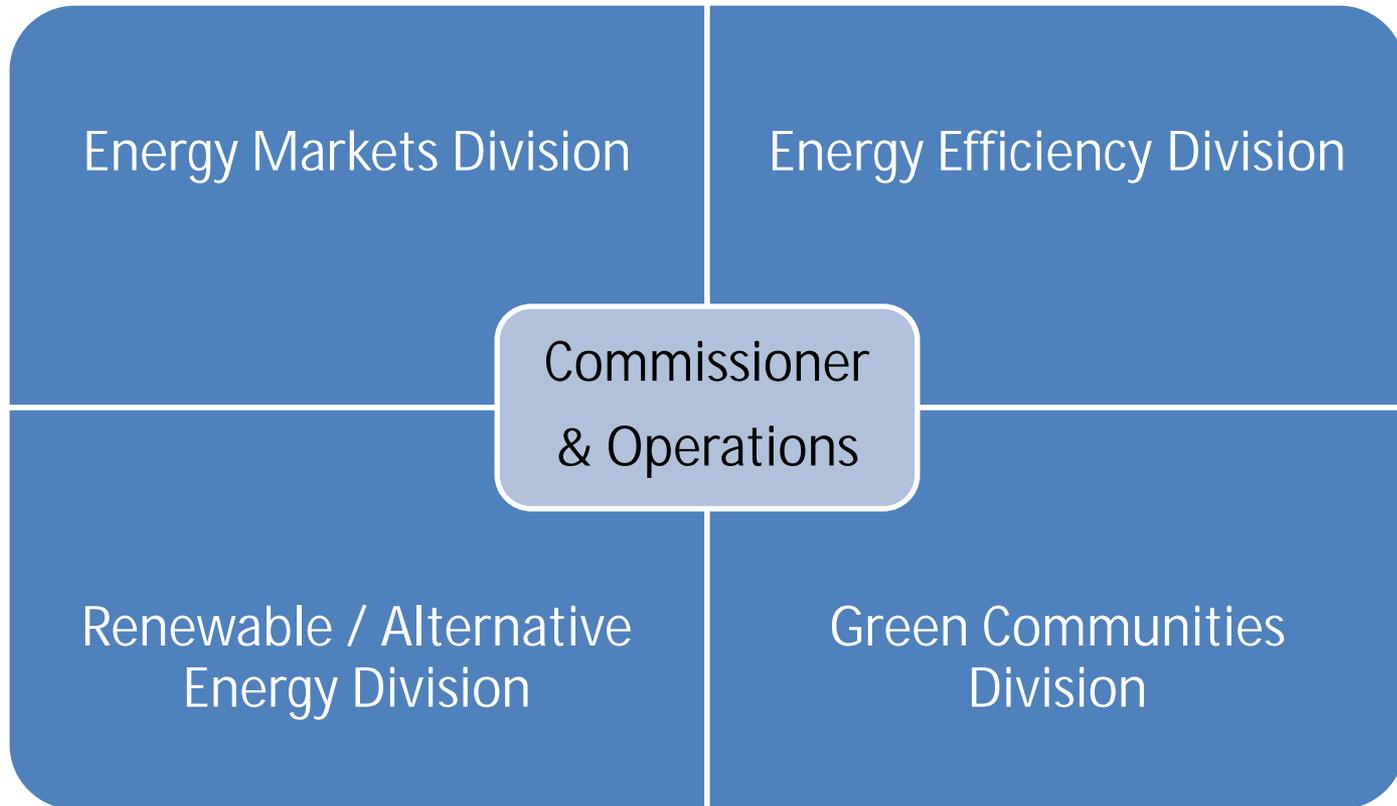
Marketing & Stakeholder
Engagement Team

March 18, 2014

AGENDA

- Housekeeping
- Participant introductions
- Remarks from Commissioner Mark Sylvia
- Presentation: *Energy & Climate Science Education Initiative*
- Questions and Discussion
- Wrap-up / Next Steps

DOER Structure



Operations include:

- energy policy & assurance, legal, administration, finance, HR, and marketing/stakeholder engagement



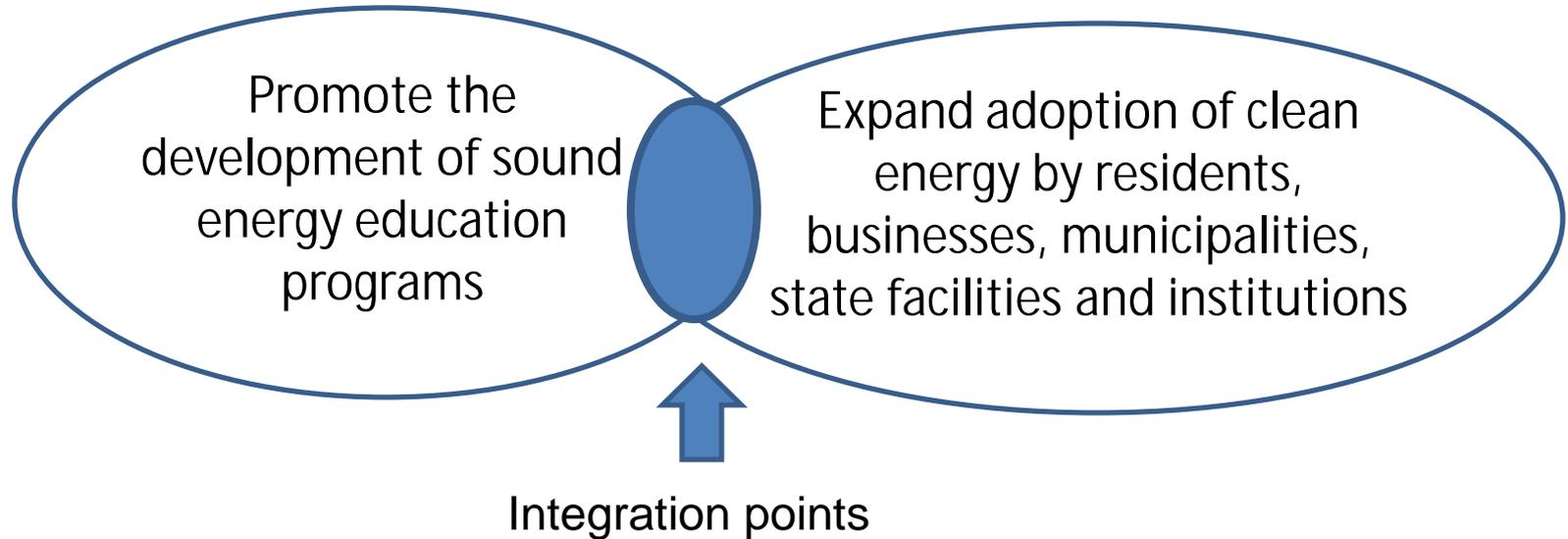
Massachusetts Department
of Energy Resources

DOER Mission

Creating a Cleaner Energy Future for the Commonwealth

- Ensure deployment of all cost-effective energy efficiency
- Maximize development of clean energy resources
- Create and implement energy strategies to assure reliable supplies and improve the cost of clean energy relative to fossil-fuel based generation
- Support Massachusetts' clean energy companies and spur Massachusetts' clean energy employment

Clean Energy / Climate Science Literacy



What State Energy & Environment Educational Activities Already Exist?

- EOEEA: Secretary's Advisory Group on Energy and Environmental Education (SAGEE): annual awards; environmental literacy plan
- DOER
 - ∅ Collaborates with Mass Save® administrators on NEED teacher workshops and kits
 - ∅ Collaborates with DESE on Green Ribbon Schools, Green Schools conference, integrating clean energy and climate science lessons into STE curriculum frameworks
 - ∅ Initiating Clean Energy and Climate Science Literacy through Public Investments Initiative
 - ∅ Incorporates education into grant expectations
- MassCEC: workforce development ("Learn and Earn," internship program) and public outreach
- MassDEP: GreenTeam



Massachusetts Department
of Energy Resources

Request for Information

Objective: increase the public's awareness of the benefits of clean energy investments in two ways:

- facilitate the integration of clean energy and climate science into Massachusetts' K-12 Science, Technology and Engineering (STE) curriculum frameworks
- enhance the clean energy and climate science literacy of students, school communities and all citizens interacting with state and municipal governments

Methods:

- expanding the number of teachers who access and engage with related education, training, and curriculum
- broadening exposure of K-12 students to related education and curriculum, especially in schools that would benefit from enrichment of curriculum supporting the Massachusetts frameworks, to encourage a life-long passion for science inquiry
- creating statewide energy and environment communications standards that will be used to provide consistent educational messaging and visual displays related to energy improvements made in
 - Ø schools, state and municipal facilities, and
 - Ø eligible commercial buildings

Success Factors

- Identify, tap and promote experts, resources and partners already at work in STEM education
- Leverage public and private investments in clean energy as opportunities to educate and engage

K-12 Curriculum and Activities

Guiding principle: Students' STE education will be more effective if hands-on examples based on clean energy and climate science topics are used to:

- excite Massachusetts students, especially those who have received less exposure and motivation to these educational topics
- give all STE teachers, not just those who already have a substantial understanding of these topics, the desire and resources to use the topics as effective teaching tools.

K-12 Curriculum and Activities

Scope-of-work

- Give teachers improved access to topic resources
- Train them in effective use and delivery of those resources
- Facilitate students' hands-on access to high quality programs related to educational clean energy topics

Public Literacy & Engagement

- Current Outreach
 - ∅ [DOER Website](#), eblasts, blog, Twitter
 - ∅ Programs (e.g., Solarize Mass, Mass Save, Green Communities, Leading by Example, renewable thermal pilots, etc.)
 - ∅ Events (e.g. STEM Summit)
 - ∅ Alliances (MassDEP's Green Team, Mass Save working group)
- Leverage public and private investments in clean energy as opportunities to educate
 - ∅ Green Communities municipal grants
 - ∅ Leading by Example/AEP
 - ∅ Solar incentives (SRECs, Solarize, Comm. Solar)
 - ∅ Alternative transportation (EV charging stations, public vehicles)
 - ∅ Mass Save incentives
 - ∅ More...



Public Literacy & Engagement

Scope-of-work

Create a statewide energy and environment presence that will be used to

- provide educational displays and messaging in schools, state and municipal facilities
- potentially expand to identify improvements in businesses, campuses, and home

Integration of K-12 & Public Literacy

Guiding principle: Wherever there is an energy improvement, there will be consistent messaging, media, and/or signage designed to make the audience aware of the:

- energy upgrade: what it is and how it benefits students and other citizens of Massachusetts at a high level
- role of the state entity or program, if any, that helped make it possible
- actions that can be taken by the individual or organization to improve their own buildings and/or behavior

Funding and Process

- DOER is committing Alternative Compliance Payment (ACP) funds for its clean energy education initiative
- An [RFI was issued](#) to gather information from potential participants
- Final responses due on April 3, 4 p.m.
- DOER will create a RFR – based on feedback from the RFI – to execute the goals of the initiative

Questions and Discussion

- Integrating all dimensions of proposal
- Organization types
- Community development
- Excitement - viral interest
- Gamification
- Surveys - current CE/CS teaching
- Fully funding school districts that embrace clean energy and climate science (CE/CS) completely

Thank you!

Susan Kaplan & Tom Witkin
Marketing & Stakeholder Engagement

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