

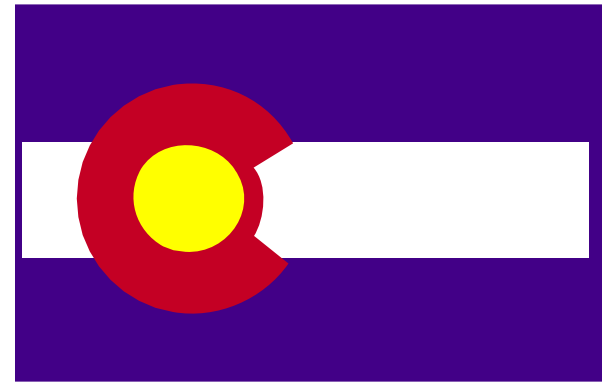
Supplemental Environmental Projects

**RE/EE SEPs for the
Present and Future**

Jill Cooper, CO Dept. of Public
Health & Environment



Colorado's SEP Policy



- Multi-media benefits (no nexus)
- Geographic nexus
- Emphasizes P2, E2, alternative energy
- Other creative projects
- No or lower multiplier for certain projects
- Traditional: emissions reduction projects
- Quantify environmental benefits
- Submit SEP Completion Report
- EPA does not have authority to approve or disapprove SEPs

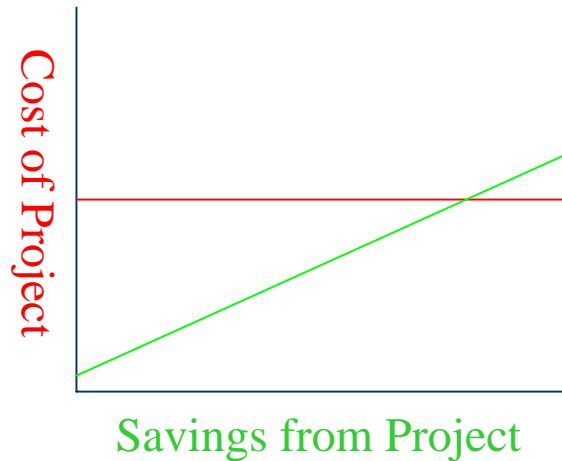
Pollution Prevention SEPs

- If strong P2 project, 1:1 multiplier

\$15,000 penalty = \$15,000 SEP value

Pollution Prevention SEPs

- If strong P2 project, 1:1 multiplier
- Breakeven analysis



Pollution Prevention SEPs

- If strong P2 project, 1:1 multiplier
- Breakeven analysis
- Small businesses do P2 assessment as phase 1 and agree to implement P2 projects as phase 2 (or pay balance)

Phase 1: Assessment

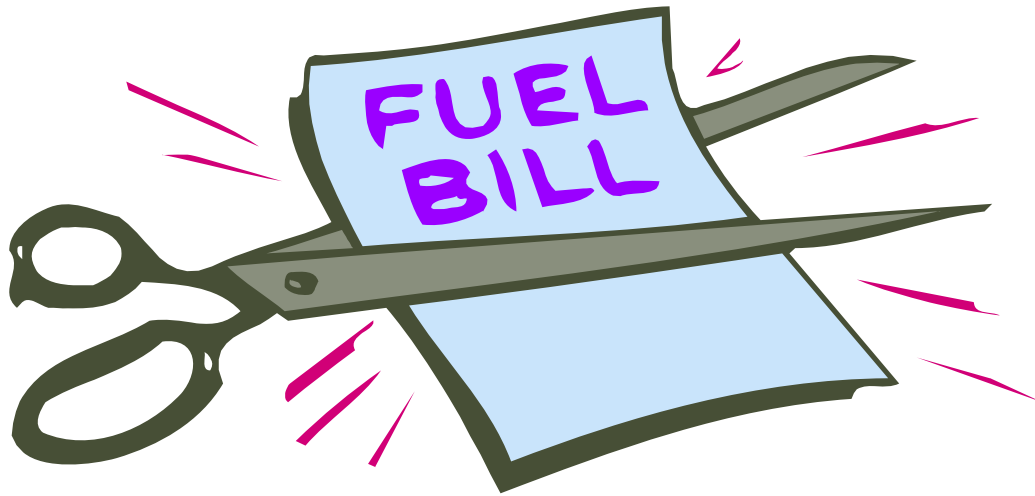
Phase 2: Implementation

Pollution Prevention SEPs

- Sustainable / green building projects (hospitals, schools, visitor centers) (SBIC & LEED)
- Purchase and implementation of chemical inventory and tracking software
- Equipment upgrades:
 - Solvent stills upgrades
 - Installation of secondary containment under processing areas
 - Sludge presses
 - Solvent replacement
 - Process equipment replacements

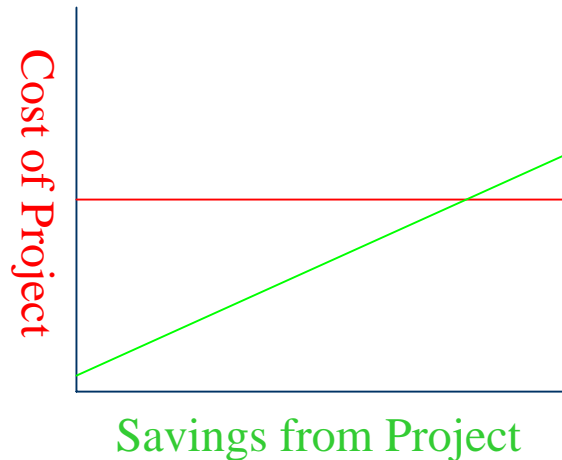
Energy Efficiency SEPs

- Implement E2 project and savings re-invested in other environmentally beneficial projects



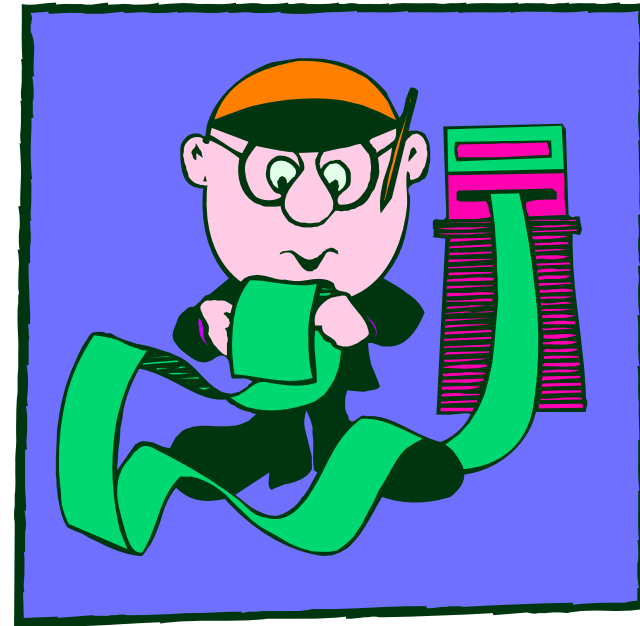
Energy Efficiency SEPs

- Implement E2 project and savings re-invested in other environmentally beneficial projects
- Break-even analysis



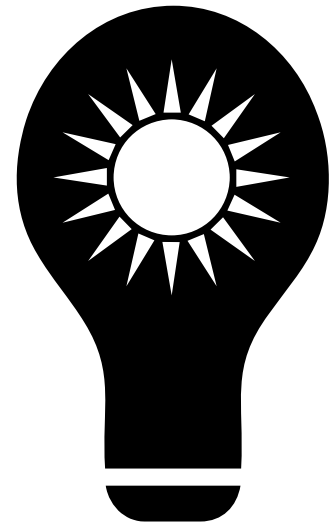
Energy Efficiency SEPs

- Implement E2 project and savings re-invested in other environmentally beneficial projects
- Break-even analysis
- Environmental cost accounting



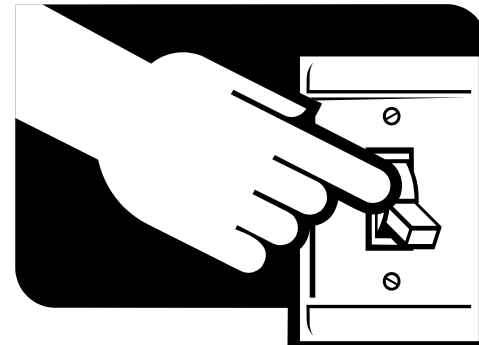
Energy Efficiency SEPs

- Implement E2 project and savings re-invested in other environmentally beneficial projects
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- Environmental cost accounting
- Green lights project (university)



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Energy Efficiency SEPs



- Implement E2 project and savings re-invested in other environmentally beneficial projects
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- Environmental cost accounting
- Green lights project (university)
- E2 assessment project (aerospace)
- Insulation project (university)
- Light change out (airport)

Alternative Energy SEPs



Alternative Energy SEPs

Wind Power SEP (Manufacturer)



- \$316,000 civil penalty
- 1:1.2 multiplier, \$303,000 SEP
- Premium 2.5 cents per kWh
- Purchase wind power for 5 years
- Utility set up escrow account
- Total kWh 12,134,400 purchased for 5 years
- Build turbine to meet demand for SEP

Alternative Energy SEPs

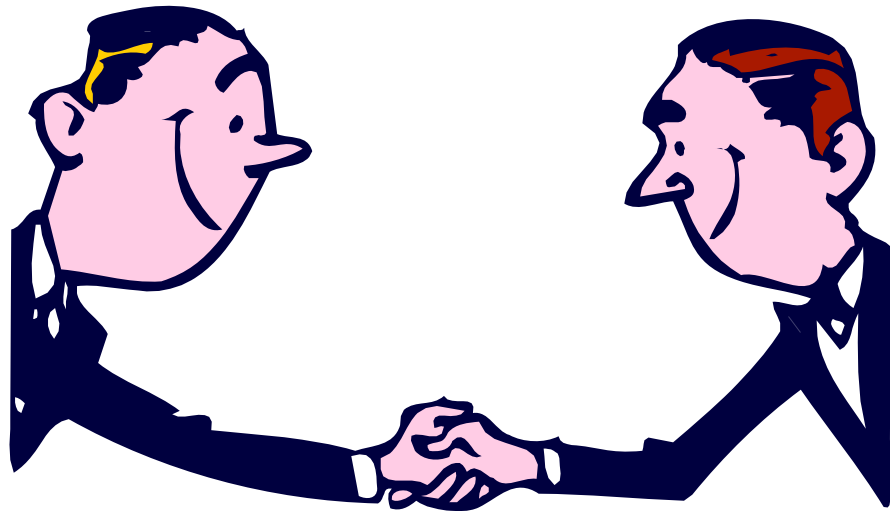
Wind Power SEP (Manufacturer)



- Emissions avoided
 - NO_x 97 tpy
 - SO₂ 73 tpy
 - CO₂ 3,640 tpy
- Environmental benefits equivalent to:
 - 4.85 million vehicle miles not traveled per month
 - 1,820 tons coal not burned
 - 1,011 acres trees planted
- Challenges: contract, accounting, logistics
- Project team: Company, NREL, USDOE, PSCo, L&WF

Alternative Energy SEPs

- Partnership with NREL, L&WF, USDOE



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- Fund for alternative energy projects managed by StEPP Foundation (\$1.2 million into fund)



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- Fuel cell and solar energy projects
- Natural gas fueling station and alternative energy vehicles (natural gas company and landfill)

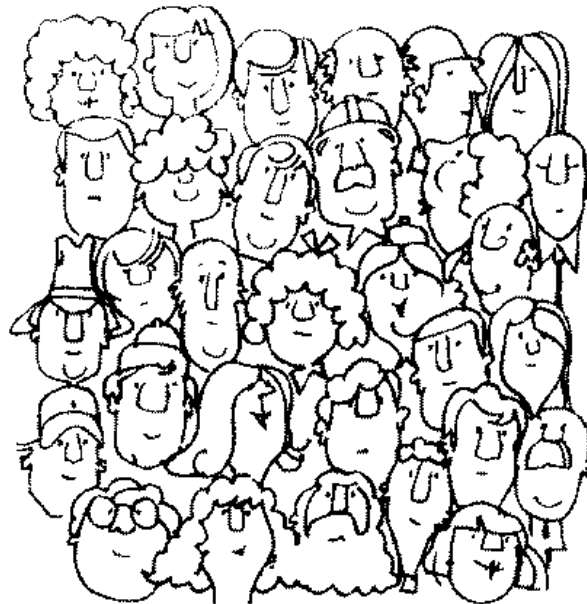
Community-Based SEPs

- Community donation
 - Escrow account
 - Benefit local community - focus on local needs
 - Projects submitted to panel
 - Comply with SEP policy
 - RMSM and Conoco



Community-Based SEPs

- Community donation (steel processor)
- Allow community to decide where money spent (paper manufacturer)



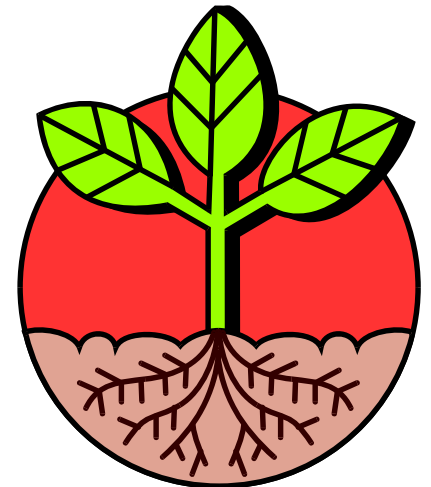
Community-Based SEPs

- Community donation (steel processor)
- Allow community to decide where money spent (paper manufacturer)
- Donation for green composting (hog farm)



Community-Based SEPs

- Community donation (refinery)
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- Tree planting (grocery store)



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- Tree planting (grocery store)
- Fund community household chemical roundup program (refinery)

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- Allow community to decide where money spent (paper manufacturer)
- Donation for green composting (hog farm)
- Tree planting (grocery store)
- Fund community household chemical roundup program (refinery)
- E2 assessments for citizens/employees

Other Projects



- Education and outreach: industry and in
- Environmental Management Systems
- Fire Impacted Watershed Fund
- Wetlands restoration / habitat recovery / enhancements for threatened and endangered species / conservation easements
- Mentoring efforts
- Quality of life projects (tree planting, noise reduction, odor control, wildlife protection)
- Traditional control and monitoring projects

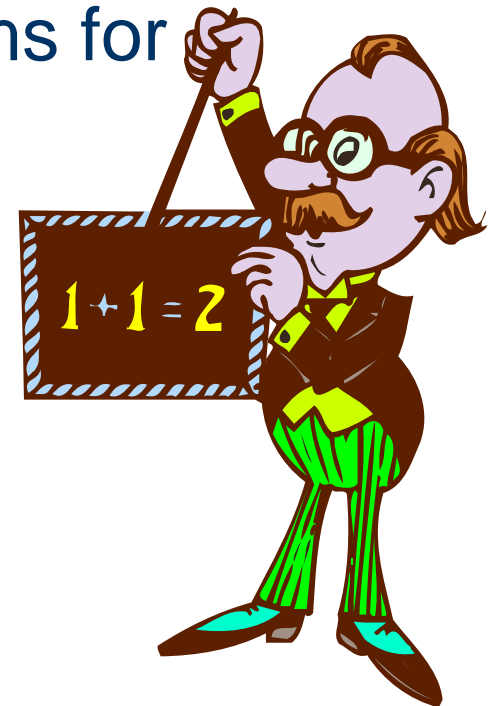
Future

- Flexibility to allow multi-media, alternative energy, community, and education projects



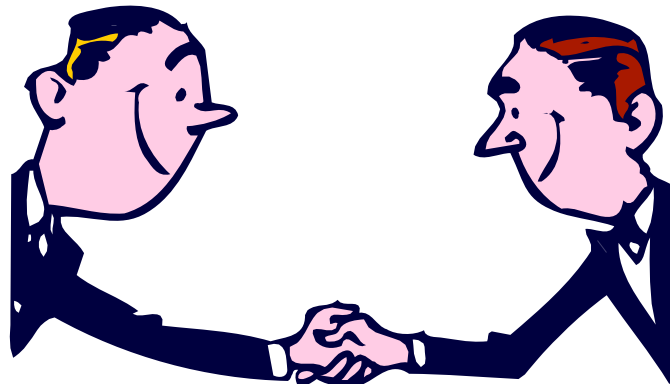
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- Educational material and systems for environmental accounting



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- Flexibility to allow multi-media, alternative energy, community, and education projects
- Educational material and systems for environmental accounting
- Coordination between state/federal agencies
- Measure outcomes for emissions reductions and other environmental benefits
- Partnerships with universities, governmental agencies, not-for-profits

