Green Accountability Performance (GAP)
Committee Meeting

3900 Main Street, Riverside, CA 92501
Mayor’s Ceremonial Room, City Hall, 7th floor

Wednesday, October 8, 2014
4:00 - 5:30 p.m.
Meeting Agenda and Objectives

• Meeting Objectives
  – Present the Riverside Restorative Growthprint – Draft Climate Action Plan (RRG-CAP)
  – Identify additional GHG reducing entrepreneurial strategies to meet the 2035 reduction target

• Meeting Agenda
  – Presentation: Overview of the draft RRG-CAP
  – Facilitated discussion
  – Closing remarks/adjournment
    • Talk with project team one-on-one
Project Objectives

- Develop measures to reduce GHG emissions (to 49% below baseline by 2035)
- Inspire entrepreneurial opportunities and job creation
- Facilitate Smart Growth development and stimulate sustainable infrastructure investment
- Develop a tracking tool to monitor progress
- Inform, engage and collaborate with stakeholders

CAP → 💡 → 🧐

Riverside

RESTORATIVE GROWTHPRINT
Why Prepare a Climate Action Plan?

• Comply with State regulations and guidelines
• Provides a framework for many things we already do
  – Land use
  – Transportation
  – Utility infrastructure
  – Environmental stewardship
  – Healthy lifestyles
• State law does not require CAPs but does incentivize
Incentives and Benefits of a Climate Action Plan

• CEQA streamlining
• Priority funding
• Local control
• Co-benefits
  – Economic
  – Health
  – Environmental
• Marketing/business attraction
Climate Action Planning Process

1. Inventory and forecast emissions
2. Establish a reduction targets
3. Develop Climate Action Plan
4. Implement plan and monitor results
Community Emissions Inventory and Forecasts by Sector

2007 2010 2020 2035

-13.4% +14.3% +40.4%

MTCO2e

Solid Waste
Transportation
Commercial/Industrial
Residential

Riverside
RESTORATIVE GROWTHPRINT
Emissions Reduction Targets

- Align with AB 32 (2020) and SB 375 (2035)
- Align with WRCOG Subregional CAP targets
- Aligns with Executive Order S-3-05
- Recommended reduction targets:
  - 15% below 2010 emissions by 2020
    - 26.4% below 2007 baseline by 2020
  - 49% below 2007 baseline by 2035
Developing Emissions Reduction Measures

- Transportation + Land Use
- Energy
- Waste
- Water
- Other

State measures | Regional measures | Local measures

Riverside: Restorative Growth Print
# Emissions Targets and Reductions

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2010</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAU Emissions (MTCO$_2$e)</td>
<td>3,024,066</td>
<td>2,617,540</td>
<td>3,004,212</td>
<td>3,663,205</td>
</tr>
<tr>
<td>Recommended Targets</td>
<td>~</td>
<td>~</td>
<td>-15% from 2010</td>
<td>-49% from 2007</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>-26.4% from 2007</td>
<td></td>
</tr>
<tr>
<td>Target Emissions Level (MTCO$_2$e)</td>
<td>~</td>
<td>~</td>
<td>766,827</td>
<td>2,120,931</td>
</tr>
<tr>
<td>Emissions Reductions Achieved (MTCO$_2$e)</td>
<td>~</td>
<td>~</td>
<td>1,106,010</td>
<td>1,634,191</td>
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<tr>
<td>Resulting Emissions</td>
<td></td>
<td></td>
<td>-37% from 2007</td>
<td>-33% from 2007</td>
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</tbody>
</table>
Reductions Achieved Through State, Regional and Local Measures

- Baseline
- 2020 Emissions Target
- 2035 Emissions Target
- Business as Usual Emissions

- 779,304 MT reduction needed by 2020
- 2,130,921 MT reduction needed by 2035

Legend:
- Local GHG Reductions
- State GHG Reductions
- Target GHG Emissions
- Total Business As Usual
2035 Emissions Reductions

- Local: 14.4%
- State/Regional: 85.6%

- Solid Waste: 38.8%
- Water: 59.6%

- Energy
- Transportation
Reduction Measures
Transportation and Land Use

- State and Regional Measures
  - Pavley & Low Carbon Fuel Standard
  - Metrolink Expansion
  - Express Lanes
  - Congestion Pricing
  - Telecommuting
  - Goods Movement
  - Electric Vehicle Plan & Infrastructure
Reduction Measures
Transportation and Land Use

• Local Measures
  – Bicycle Infrastructure
  – Bicycle Parking
  – End of Trip Facilities
  – Transportation Demand Management
  – Traffic Signal
  – Density
  – Mixed Use Development

  – Pedestrian Only Areas
  – Fixed Guideway Transit
  – Neighborhood Electric Vehicle Programs
  – Subsidized Transit
  – Bike Share Program
  – Car Share Program
  – SB 743 Alternative to LOS
Reduction Measures

Energy Efficiency and Renewables

• State and Regional Measures
  – Renewables Portfolio Standard
  – California Building Energy Efficiency Standards (Title 24)
  – HERO Residential Program
  – HERO Commercial Program

• Local Measures
  – Traffic and Street Lights
  – Shade Trees
  – Local Utility Programs - Electricity
  – Renewable Energy Production on Public Property
  – UC Riverside Carbon Neutral Program
Reduction Measures
Water, Waste and Green Infrastructure

• State and Regional Measures
  – Construction and Demolition Waste Diversion
• Local Measures
  – Water Conservation and Efficiency
  – Yard Waste Collection
  – Food Scrap and Paper Diversion
GHG Reduction Potential
2035 Top 4 State/Regional Measures

- SR-6: Pavley & Low Carbon Fuel Standard (49.7%)
- SR-1: Renewables Portfolio Standard (26.6%)
- SR-4: HERO Commercial Program (6.2%)
- SR-3: HERO Residential Program (4.6%)
GHG Reduction Potential
2035 Top 4 Local Measures

- T-5: Traffic Signal Coordination
  - MTCO2e: 29,200
  - %: 29.2%

- E-3: Local Utility Programs – Electricity
  - MTCO2e: 22,000
  - %: 18.5%

- T-9: Limited Parking Requirements for New Development
  - MTCO2e: 11,000
  - %: 10.5%

- T-13: Fixed Guideway Transit
  - MTCO2e: 5,000
  - %: 5.9%
Local Economic Opportunities and Other Community Co-Benefits

- Local Economic Opportunities
- Energy
- Health
- Resources
- Mobility
Reduction Measures
Criteria and Analysis

- GHG Reduction Potential (MT CO2e/year)
- Synergy with RRG-EPAP (high, medium, low)
- Relative Cost Effectiveness (high, medium, low)
- Ease of Implementation (high, medium, low)
### Reduction Measures

**Highest Synergy with EPAP**

<table>
<thead>
<tr>
<th>State and Regional Measures by Sector</th>
<th>Sector</th>
<th>2035 Riverside (MT CO₂e/yr)</th>
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<tbody>
<tr>
<td>SR-3 HERO Residential Program</td>
<td>Energy</td>
<td>64,964</td>
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<tr>
<td>SR-4 HERO Commercial Program</td>
<td>Energy</td>
<td>86,276</td>
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<td>SR-10 Telecommuting</td>
<td>Energy</td>
<td>19,853</td>
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<td>SR-12 Electric Vehicle Plan and Infrastructure</td>
<td>Energy</td>
<td>39,705</td>
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<tr>
<td>SR-13 Construction and Demolition Waste Diversion</td>
<td>Solid Waste</td>
<td>4,865</td>
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<table>
<thead>
<tr>
<th>Local Measures by Sector</th>
<th>Sector</th>
<th>2035 Reductions (MT CO₂e/yr)</th>
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<tbody>
<tr>
<td>E-3 Local Utility Programs – Electricity</td>
<td>Energy</td>
<td>43,491</td>
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<tr>
<td>E-4 Renewable Energy Production on Public Property</td>
<td>Energy</td>
<td>Supporting</td>
</tr>
<tr>
<td>E-5 UC Riverside Carbon Neutral Program</td>
<td>Energy</td>
<td>Supporting</td>
</tr>
<tr>
<td>T-10 Bus Rapid Transit Services</td>
<td>Transportation</td>
<td>2,330</td>
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<td>T-13 Fixed Guideway Transit</td>
<td>Transportation</td>
<td>13,981</td>
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<td>T-14 Neighborhood Electric Vehicle Programs</td>
<td>Transportation</td>
<td>4,660</td>
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<tr>
<td>T-16 Bike Share Program</td>
<td>Transportation</td>
<td>280</td>
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<tr>
<td>T-17 Car Share Program</td>
<td>Transportation</td>
<td>3,728</td>
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<tr>
<td>T-18 SB 743 as Alternative to LOS</td>
<td>Transportation</td>
<td>2,703</td>
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<tr>
<td>W-1 Water Conservation and Efficiency</td>
<td>Water</td>
<td>10,748</td>
</tr>
<tr>
<td>SW-2 Food Scrap and Paper Diversion</td>
<td>Solid Waste</td>
<td>9,317</td>
</tr>
</tbody>
</table>
Reduction Measures
Where Can We Innovate?

- Identify local economic opportunities with greatest GHG benefits
  - Expand electric vehicle program
  - Workforce housing program
  - Incentivize mixed use development
  - Create green enterprise zone / eco-district
  - Green business program
  - Cleantech incubator
Reduction Measures
Where Can We Innovate?

- Micro grid initiative
- Mobile solar (energy storage) on vacant land
- Pilot on-site water retention and treatment at UCR
- Waste to energy for converting organic waste into biogas
- Customer technology energy grants
## Next Steps

### CLIMATE ACTION PLAN  
**APRIL-OCTOBER**
- Inventory and forecast emissions
- Establish reduction targets
- Identify and evaluate reduction measures
- Develop Climate Action Plan (CAP)

### ECONOMIC PROSPERITY ACTION PLAN  
**NOVEMBER-MARCH**
- Identify top 10 entrepreneurial opportunity areas in CAP
- Crowdsource & co-create entrepreneurship ideas
- Identify incentives, establish promotional strategy, crowdsource implementation ideas
- Prepare Economic Prosperity Action Plan (EPAP)

### IMPLEMENTATION PLAN  
**MARCH-JUNE**
- Develop Implementation Strategy
- Create monitoring & tracking tool
- Prepare environmental clearance
- Monitor results
Thank You

If you have an idea, question, or concern after this meeting, contact us!

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(951) 826-5219