

# Mobile Applications That Will Change the Way We Use Broadband

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# Enviance: Software to Save the Planet

*Enviance System leverages the Internet, and deep environmental domain knowledge to unlock the data needed to confidently manage greenhouse gas and regulatory compliance*

- Enviance System automates
  - Greenhouse gas foot printing and reduction management
  - Air, water, and waste emissions management
  - Compliance/GHG task management (calendar, reminders, escalations)
  - Notifications and escalations when data or tasks may be out of compliance
  - Regulatory and stakeholder reporting



# Pioneer and Thought Leader

## FIRSTS:

- 2001: Internet-based system to automate air, water, and waste emissions compliance
  - 2005: Internet-based greenhouse gas (GHG) management system
  - 2008: Internet-based vehicular carbon dioxide management system
  - 2008: GHG Bootprint in Department of Defense (2008)
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- Only 'full media' provider of Internet-based system
  - 7x24x365 operation, across 45 countries
  - Adopted by leaders in Process Industries and by US Army
  - Over 500 years of environmental compliance experience
  - 360° knowledge: Employees include former regulators, facility managers, consultants, soldiers, installation inspectors



# Working with Climate Change Leaders



- **Electric Utilities - AEP**
  - CDP Climate Leaders Index
- **Chemicals - DuPont**
  - #1 USA & #2 Global Ceres
- **Oil & Gas – Chevron**
  - DJ Sustainability Index
- **Major US City – Denver**
  - 1<sup>st</sup> Driving Behavior Study
- **Federal DoD – US Army**
  - First GHG “bootprint”

# Increased Bandwidth Further Opens Up the Internet and Improves the Quality of Compliance

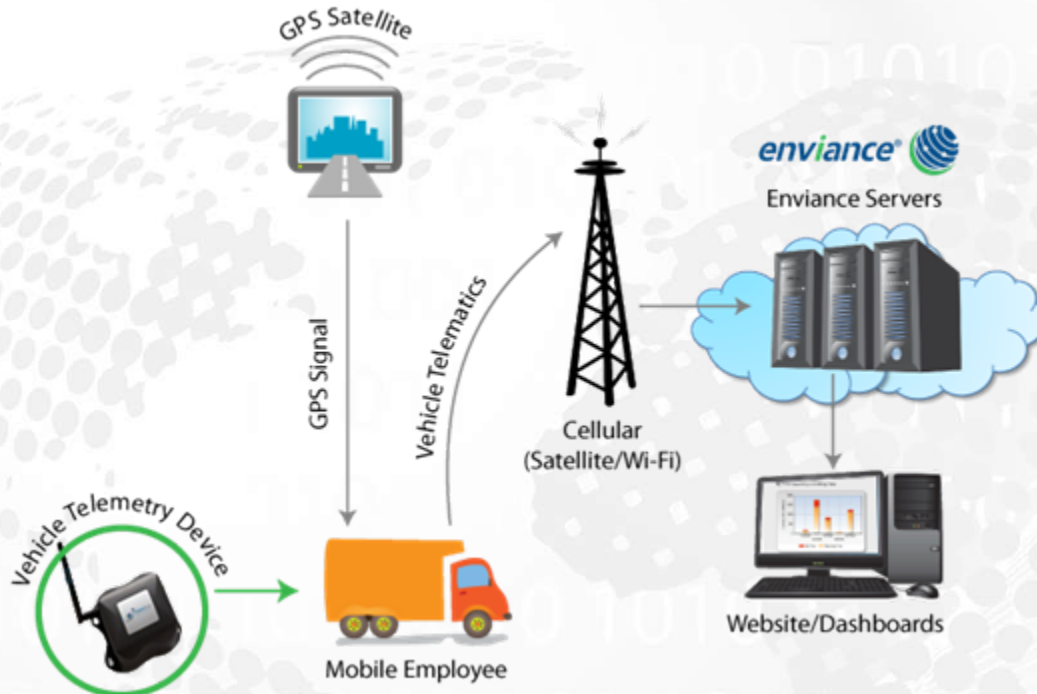
Activity Performed	Current Bandwidth	Increased Bandwidth
Complete mandated task	✓	✓
Manually enter data required for compliance	✓	✓
Upload data in 'bulk' (e.g. via spreadsheet) to ensure compliance		✓
Run reports to timely manage compliance data		✓
Review online 'dashboards' <ul style="list-style-type: none"> <li>- Achievement of carbon emission goals</li> <li>- Energy efficiency</li> <li>- Impact on operations based on cost of carbon</li> </ul>		✓
Add or modify regulations/permit conditions for 'evergreen' compliance system		✓
Update internal or external permit limits to maintain accurate representation of compliance obligations		✓

# 4G Enhanced Reliability and Security Increases the Value of Mobile Enterprise Applications

- Information collected, analyzed and managed, in real-time, directly at renewable energy sources
  - Solar, wind, bio-gas sources are typically in remote areas of the country
  - Real-time analysis and reporting of newly entered data, including asset efficiency, anytime, anywhere
- Improved security increases the amount and type of data that moves to and from the internet and mobile devices



# Driving Change Dashboards Via Mobile Devices Becomes a Reality With 4G



**DRIVING CHANGE**  
Reducing Vehicular CO2 Emissions

Please be aware that Driving Change will be taken offline for Scheduled Maintenance on **Friday, July 3, 2009 at 7:00 PM Pacific**. We expect to bring our servers back online before 11:30 PM Pacific. During this time you will be unable to access the Driving Change dashboards.

**Driving Snapshot**

Total Carbon Emissions Per Mile for the Last 30 Days  
Actual: 1000 pounds of CO2 Target: 1000 pounds of CO2  
You are 100% of Goal

**Congratulations!** you've reached your goal. Keep up the good driving behaviors. To continue reaching your goal, please read suggested [reduction strategies](#). See all of your [driving charts](#).

**Percent of Goal**

**Total Carbon Emissions for Last 30 Days**

1000 Emissions of CO2

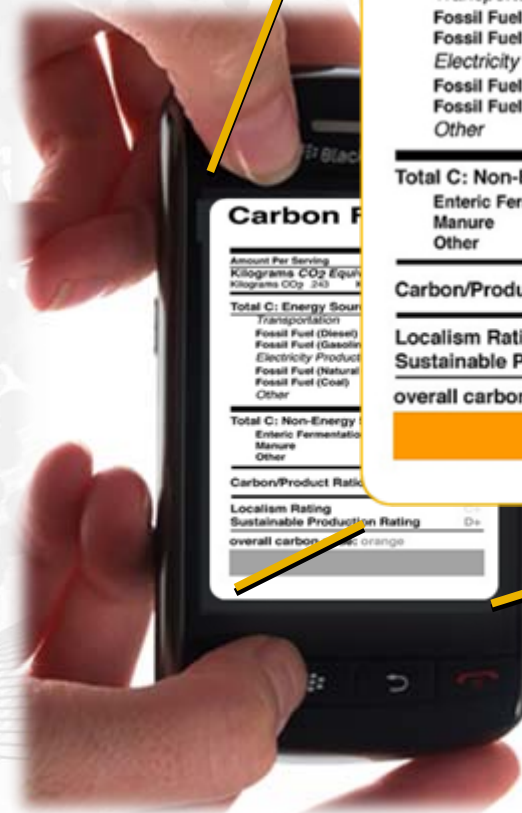
0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

Actual CO2 Goal

Source: EPA / AAA/Enviance / Envia / Terms of Use / Contact Us / Site Map

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# Extending Mobile Broadband to Supply Chain Environmentalism



**Carbon Facts**

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Amount Per Serving  
Kilograms CO<sub>2</sub> Equivalent 3.08  
Kilograms CO<sub>2</sub> .243 Kilograms CH<sub>4</sub> .123

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**Total C: Energy Sources** 243g

Transportation  
Fossil Fuel (Diesel) 120g  
Fossil Fuel (Gasoline) 48g  
Electricity Production  
Fossil Fuel (Natural Gas) 75g  
Fossil Fuel (Coal) 0g  
Other

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**Total C: Non-Energy Sources** 2840gCO<sub>2</sub>E

Enteric Fermentation 81.0g (1864gCO<sub>2</sub>E)  
Manure 25.8g (656gCO<sub>2</sub>E)  
Other 5.2g (120gCO<sub>2</sub>E)

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**Carbon/Product Ratio** 23.7

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**Localism Rating** C+  
**Sustainable Production Rating** D+

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**overall carbon code: orange**

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# Emerging Opportunity: Supply Chain Environmentalism

*Defined: the effort of the retail community to recast the competition in the commodity marketplace by treating carbon content as a differentiator for same-priced commodity products.*

## A \$1.39 screwdriver is not longer just a \$1.39 screwdriver

- De-commoditize commodity markets
  - Reshape competition in global commodity markets
- Engage the US consumer
- Green the planet by changing manufacturing practices
- Green US wallets



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[www.enviance.com](http://www.enviance.com)

