SUSTAINABILITY ACTION PLAN CITY OF PETALUMA

OCTOBER 7, 2015

IN CONSULTATION WITH





WHO WE ARE

The City operates under the Council/Manager form of government:

- Legislative and policy authority vested in the City Council .
- Administrative authority vested in the City Manager.

The City Council adopts citywide goals and priorities, and sets policy for the operation of the City.

WHAT WE DO

- Local Government
 - Public Safety Police and Fire
 - Water Supply
 - Wastewater Treatment
 - Parks & Recreation
 - Streets
 - Transit System
 - Planning and Building Services
 - Affordable Housing and Programs
- 300 Employees

WHAT WE HAVE

- City Hall
- Police Station
- 3 Fire Stations
- Petaluma Community Center, Cavanagh Center, Kenilworth Teen Center, Senior Center
- Water Field Office
- Transit Maintenance Facility
- 47 City Parks including bike/ped trails and Turning Basin Marina
- Ellis Creek Water Recycling Facility
- Water Distribution System including storage tanks and pumps
- Wastewater and Stormwater Collection Systems
- Roadway System, including Street Lights and Traffic Signals
- Corporation Yard/Animal Shelter
- Petaluma Municipal Airport and Marina
- Vehicle Fleet

WHERE WE'RE GOING...

- Petaluma General Plan 2025 (2008)
 - Goals, Policies, and Programs for the Future Development of the City.
- Petaluma River Access and Enhancement Plan (1996)
 - Floodplain Management, Restoration, Public Access and Education.
- Central Petaluma Specific Plan (2003)
 - Mixed use plan for 400 acre area.
- SMART Rail Station Areas: Transit-Oriented Development Master Plan (2013)
 - Plan for increasing transit ridership by maximizing the potential for transit-oriented development around future rail transit stations.
- Community Climate Action Plan 2020 (underway)
 - Collaborative effort among all 9 cities and the County of Sonoma to reduce GHG emissions community-wide.
- Municipal Climate Action Plan (2009)
 - City-led initiatives for achieving GHG reductions on City buildings and infrastructure.

OUR VISION & MISSION

"Sustainability. In recent years, we have confronted a range of challenges: worsening traffic, frequent flooding, limited supplies of fresh water, lack of landfill space, unstable energy prices, global climate change, and others. We acknowledge that we bear a responsibility to craft our policies for the next twenty years and beyond with consideration for the world that we will be leaving to future generations."

- Petaluma General Plan 2025

OUR GUIDING PRINCIPLES

- 1. Maintain a close-knit, neighborly, and family-friendly city.
- 2. Preserve and enhance Petaluma's historic character.
- **Preserve and enhance Petaluma's natural environment** and distinct setting in the region a community with a discrete edge surrounded by open space.
- **Enhance the Petaluma River corridor** while providing recreational and entertainment opportunities.
- 5. Stimulate and increase public access and use of pathways as alternate transportation routes by providing safe, efficient and interconnected trail system.
- **6. Provide for a range of attractive and viable transportation alternatives** such as bicycle, pedestrian, rail, and transit.
- 7. Enhance Downtown by preserving its historic character, increasing accessibility and residential opportunities, and ensuring a broad range of business and activities.
- 8. Foster and promote economic diversity and opportunities.
- 9. Expand retail opportunities to meet residents needs and promote the city's fiscal health, while ensuring that new development is in keeping with Petaluma's character.
- Continue efforts to achieve a **jobs/housing balance**, emphasizing opportunities for residents to work locally.
- 11. Foster a sustainable community in which today's needs do not compromise the ability of the community to meet its future needs.
- Ensure infrastructure is strengthened and maintained.
- 13. Integrate and connect the east and west sides of town.
- 14. Encourage cultural, ethnic, and social diversity.
- 15. Recognize the role Petaluma holds within the region and beyond.

WHAT WE'VE DONE!

Completed

- Ellis Creek Water Recycling Facility
- Traffic Signal Conversion to LEDs
- Street Light LED Pilot Project
- Lighting retrofit at all facilities
- Select HVAC replacement
- 3 Electric Vehicle Charging Stations (public)
- 28 Electric Vehicle Charging Stations (private)
- Sonoma Clean Power
- CalGreen Tier 1
- Swim Center Energy Efficiency
- Continued expansion of recycled water service
- Lawn Conversions (City Hall, PD, Cavanagh, FS)
- Community Gardens

WHAT WE WANT TO DO

Work with the Community to Cut GHG Emissions 25% Below 1990 Levels by 2020.

WHAT WE'RE GOING TO DO

- Reduce Municipal GHG Emissions
- Reduce Solid Waste Diversion in the City of Petaluma
- Provide 780 Million Gallons of Recycled Water by 2025
- Convert Waste-to-Energy at the Wastewater Treatment Facility
- Install LED Streetlights City-Wide
- Reduce Building/Facility Energy Use
- Increase Solar Installations
- Increase Employee Engagement in Sustainability
- A Market Leadership Position in Sustainability

WHY WE'RE DOING THIS

- Potential for cost savings associated with reducing water, energy, and supply needs.
- Providing opportunities to Petaluma residents and businesses to implement sustainability initiatives.
- Retaining and attracting businesses with sustainable values.
- Lead by example.

PORTFOLIO OF INITIATIVES

SHORT-TERM, MID-TERM, AND LONG-TERM



SHORT-TERM INITIATIVES, 0-6 MONTHS

Business model and strategy

• Establish Green Team

Business policies/practices

• Purchasing Policy Revised

Behavior and culture change

- Electric Vehicle Chargers Community Center, City Hall, Keller St Garage
- Water Conservation

Energy/resource management

- LED Streetlight Retrofit Phase 1
- Cool Roof Police Department

GREEN TEAM

Select staff person from 10 divisions/departments to meet bi-monthly to discuss opportunities for resource saving projects

Financial Costs/Benefits

- Cost: allocating staff time to meet and for follow-up research
- Benefit: interdepartmental discussion related to improved resource management

Intangible/Other Benefits

- Increased morale from working together to benefit departments and resources.
- Reduction of use of natural resources

Goals/Metrics: Implement one resource conserving project per year

MID-TERM INITIATIVES, 6 MONTHS-2 YEARS

Business model and strategy

• Recycled water system expansion

Business policies/practices

- Green Cleaning Janitorial Services
- Fleet Conversion to Alternate Fuel

Behavior and culture change

- Electric Vehicle Chargers Community Center, City Hall, Keller St Garage
- Water Conservation

Energy/resource management

- Community Ctr HVAC, Cool Roof, Solar, LED retrofit
- Police Department Solar
- City Hall Window Replacements
- Keller St Garage Occupancy Sensors and LED lights
- LED Retrofit Phase II

LED STREETLIGHT RETROFIT

Replace high-pressure sodium cobrahead style streetlight fixtures with LED streetlight fixtures

Financial Costs/Benefits

- \$1,750,000 project cost
- \$145,000 yearly savings
- 7.89 years estimated simple payback
- Reduced maintenance

Intangible/Other Benefits

- Green house gas reductions
- Fewer recycled bulbs
- Improved light quality
- Improved night sky
- Reduction in hazardous materials

Goals/Metrics: Energy bill savings, reduced maintenance, community satisfaction

LONG-TERM INITIATIVES, 2-5 YEARS

Business model and strategy

• BioMass to BioFuel

Behavior and culture change

•

Business policies/practices

•

Energy/resource management

- City Hall cool roof, solar
- Fire Stations cool roof, solar
- Water Field Office cool roof, solar
- Swim Centers solar
- Airport solar

BIOMASS TO BIOFUEL

Convert methane byproduct of sewage treatment to natural gas

Financial Costs/Benefits

- \$13,000,000 approx.project cost
- 150,000 gallons of NG per year
- \$394,500 estimated savings on gasoline purchases (\$2.63/gal 9-23-15)
- 32.95 years estimated simple payback

Intangible/Other Benefits

- Greenhouse gas savings
- Greening fleet
- Local fuel source
- Recycling waste/closing loop
- Reduce long-haul trucking

Goals/Metrics: 50% fleet conversion

METRICS AND EVALUATION

- Evaluation Strategy
 - Implementation of Plan goals, policies, and programs.
 - Successful implementation of initiatives.
- Metrics reporting Add a sustainability component to the City's Annual Report that documents.
 - Kwh reduced
 - Recycled water delivered
 - Solid waste diverted
 - Solar systems installed

FINANCIAL PLAN

- The City drafts and adopts a yearly, government-wide budget.
 - Proposed expenditures must be balanced with projected revenue.
- Specific, discrete projects are identified in the Capital Improvements Plan.
 - Projects will be funded by local dollars and/or grant funding.
 - Quick payback may be funded by loan.
- Programs typically funded from General Fund

SUMMARY OF RISK/REWARD

- Risks:
 - Defunct system.
 - No savings generated.
 - Community perception.
- Rewards:
 - Conserving resources.
 - Goals met.
 - Energy cost savings that can be invested elsewhere.
 - Positioning Petaluma as a leader in sustainability and a hub for businesses with sustainability as their core value.

CONCLUSION

The City of Petaluma has a **long-standing community-driven vision of sustainability**. New development is measured within the guidelines and asked to meet and exceed our collective goals.

Looking forward to **undertaking initiatives to improve** municipal operations

Looking forward to **working with all of you** as well as other business and residents to support other initiatives which **benefit the community** and its sustainability.