



**Green Carbon
Nexus**
changing the paradigm

Biomass Systems Demise & “Inconvenient Truth”

BMF

Biomass Crisis Business Development

GCN & Associates At Biomass Industry Pinnacle

After 38 years evolution GCN and associates have worked the way to the top understanding real time biomass reduction problems and developing connections within key public agencies.

Considering present Ag & Forest biomass surplus dilemma, creating **Biomass Mitigation Fund (BMF)** is overdue. Typical biomass grants have not been effective bridging the investment risk associated with startup, grassroots project development.



Growing Biomass Surplus With Few Economic Benefits

- Climate change carbon sequestration
- Improved Air & Water quality
- Biomass residues volume reduction
- Wildland fire urban defensive space
- Handling logistics management jobs
- Conversion systems operation jobs
- By-product handling & marketing jobs

BMF Definition

- An innovative way to share the risk of developing biomass conversion projects.
- BMF is limited to private sector, resource conservation and environment mitigation solutions.
- BMF is similar to an SBA start-up loan, yet unsecured, experience based and mutual benefit dependent.

Nonpartisan Issue: Why BMF Is Needed?

- California markets for biomass power plant fuel and other products produced from wood reduction operations have collapsed.
- The reduction problem is massive and growing with no plan except, continue chasing SB 32 solutions mirage at the large scale!
- All existing agency supported biomass financing programs require in business at least 3 year and well thought out business plan with 5 years+ projected P&L, plus collateral!

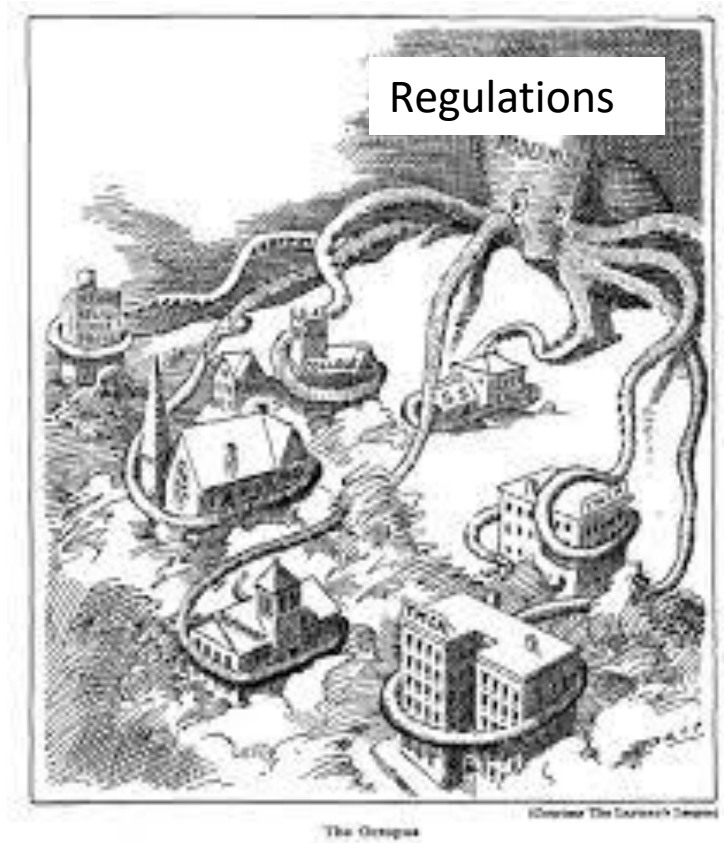
Continued

- SB 32 compliance has made it impossible for small company startup and business expansion.
- Labor regulations and liability insurance discourage hiring employees.
- Well intended laws are strangling solutions for small scale operations.
- No matter what the conversion technology, biomass business development is a financial risk management business.

SB 32 Compliance

Generally, only larger well established companies can absorb the added time, paperwork, expense hiring specialists to handle all the compliance reporting issues, continuous law modification to:

- *Water Quality*
- *Air Quality*
- *Carbon Tracking*
- *Permitting Fees*
- *Legal Fees*
- *Labor Laws*
- *Engine Permits*
- *Others*



SB 32 Green Industries

CHOOSING 1 OF 3 GREEN INDUSTRIES

1 - Sustainable Farming / Farm Energy / Soils Nutrients

2 - Urban MSW & Industrial Recycling & Energy

3 - Wholesale Utility Power / Transportation Fuels

Biomass

Gasification / Pyrolysis

Orchard Wood

Activated Carbon

Biochar Blending

Soil Nutrients

Aerobic Processing

Forest Thinning

Recycling

MSW Incineration

Plasma Arch

Landfill Disposal

Landfill Biogas

Wastewater Treatment

Bio-solids

Composting

Energy

Natural Gas

Coal

Nuclear

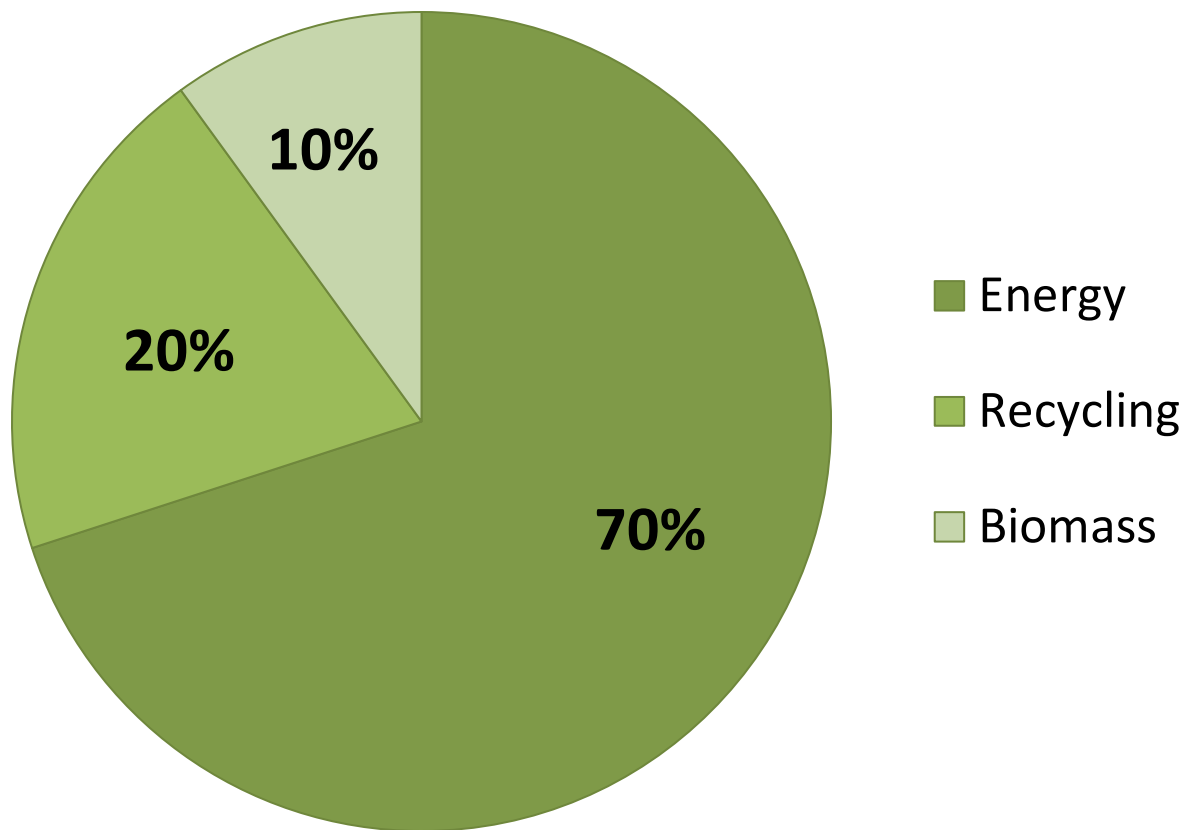
Hydro

Geothermal

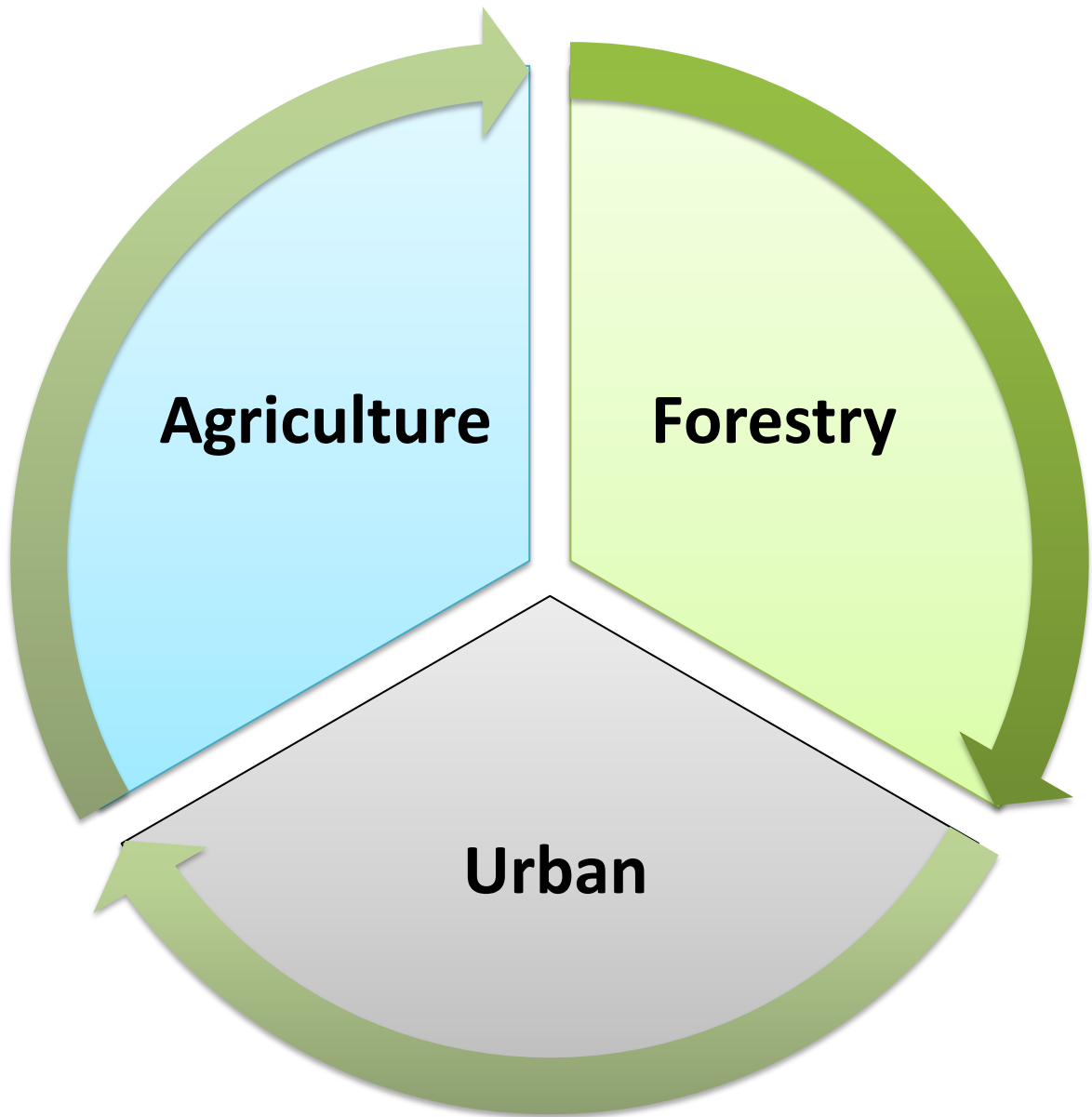
Wind / Solar

Bio-refineries

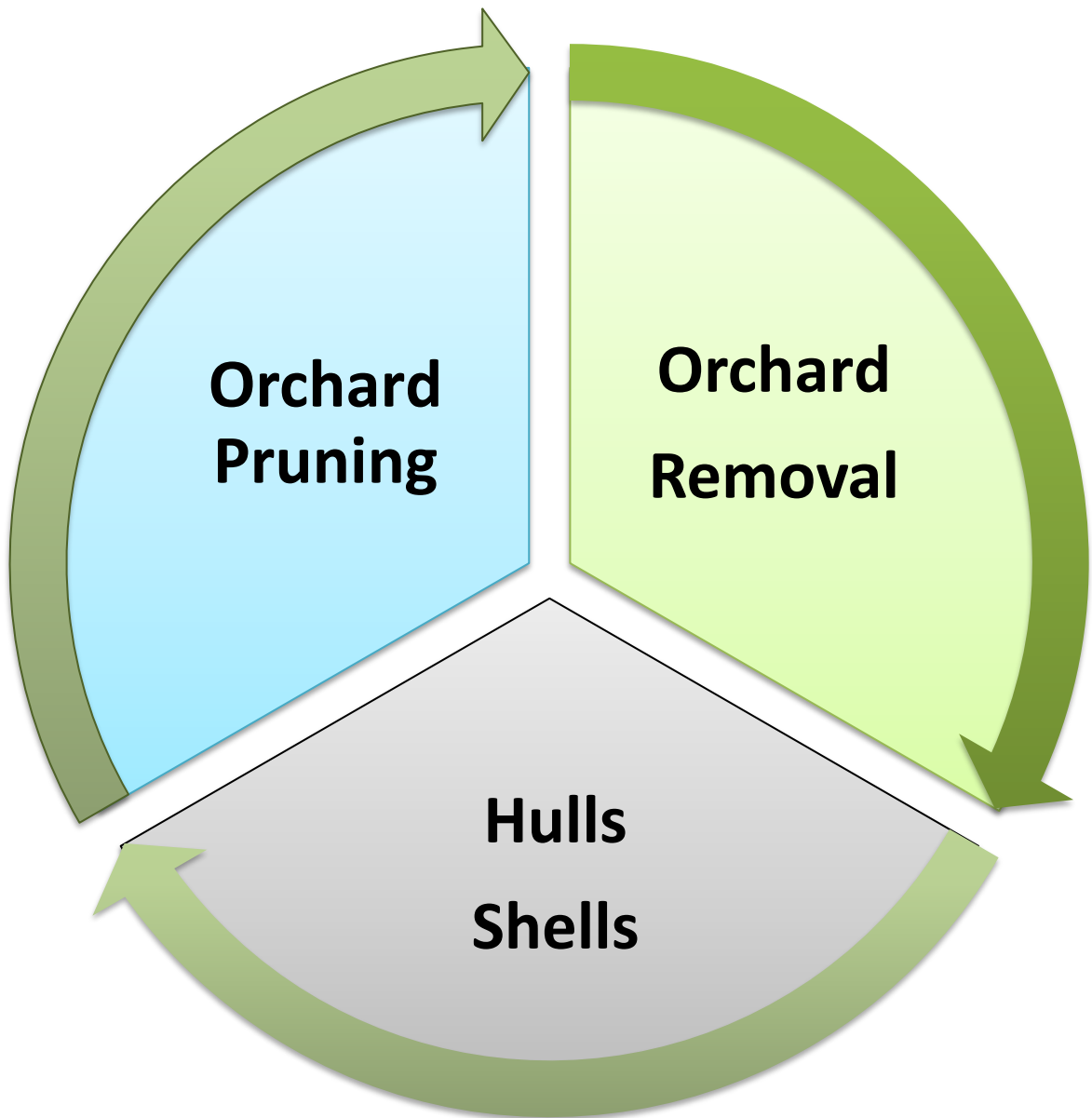
California Green Technology Estimated Proportion



Distinct Biomass Sectors



Ag Biomass Feedstocks



“Biomass to Biochar” Cooperative

Business Co-ops for Professionals

Cooperatives offer distinctive benefits to professionals who want to maintain individual clients and desire to maximize affordability by sharing a business name, offering their services in a shared on-line site or in a shared commercial space, and, if desired, sharing support staff.

By working together with like professionals, they can gain marketing advantages, reduce overhead costs, reap quantity discounts on supplies through joint purchasing, and maintain control over their work/practice.

Calif. Center for Cooperative Development

<https://cccd.coop/co-op-info/co-op-types/business>

BMF Pilot Program Collaboration

A **pilot program**, also called a feasibility study or experimental trial, is a small-scale, short-term experiment that helps an organization learn how a large-scale project might work in practice.

- **Madera EDC / Bobby Kahn**

<https://maderacountyedc.com/>

- **Manteca EDC / Don Smail**

<https://www.ci.manteca.ca.us/>

- **Colusa EDC / Ben Felts**

<https://www.colusachamber.com>

- **Chico 3CORE / Marc Nemanic**

http://www.3coreedc.org/loan_programs/

Interim BMF Governance

Green Carbon Nexus

There are biomass experienced associates willing to donate time with a startup steering committee

Bill Kidd – CPA / Finance Planning

billkidd@comcast.net

greencarbonnexus.com

Thor Bailey / GCN President

530-966-2882

greencarbonnexus.org