Renewable Electric Cooperative Renewable Development

Energy for Economic Growth Sheering Committee Meeting

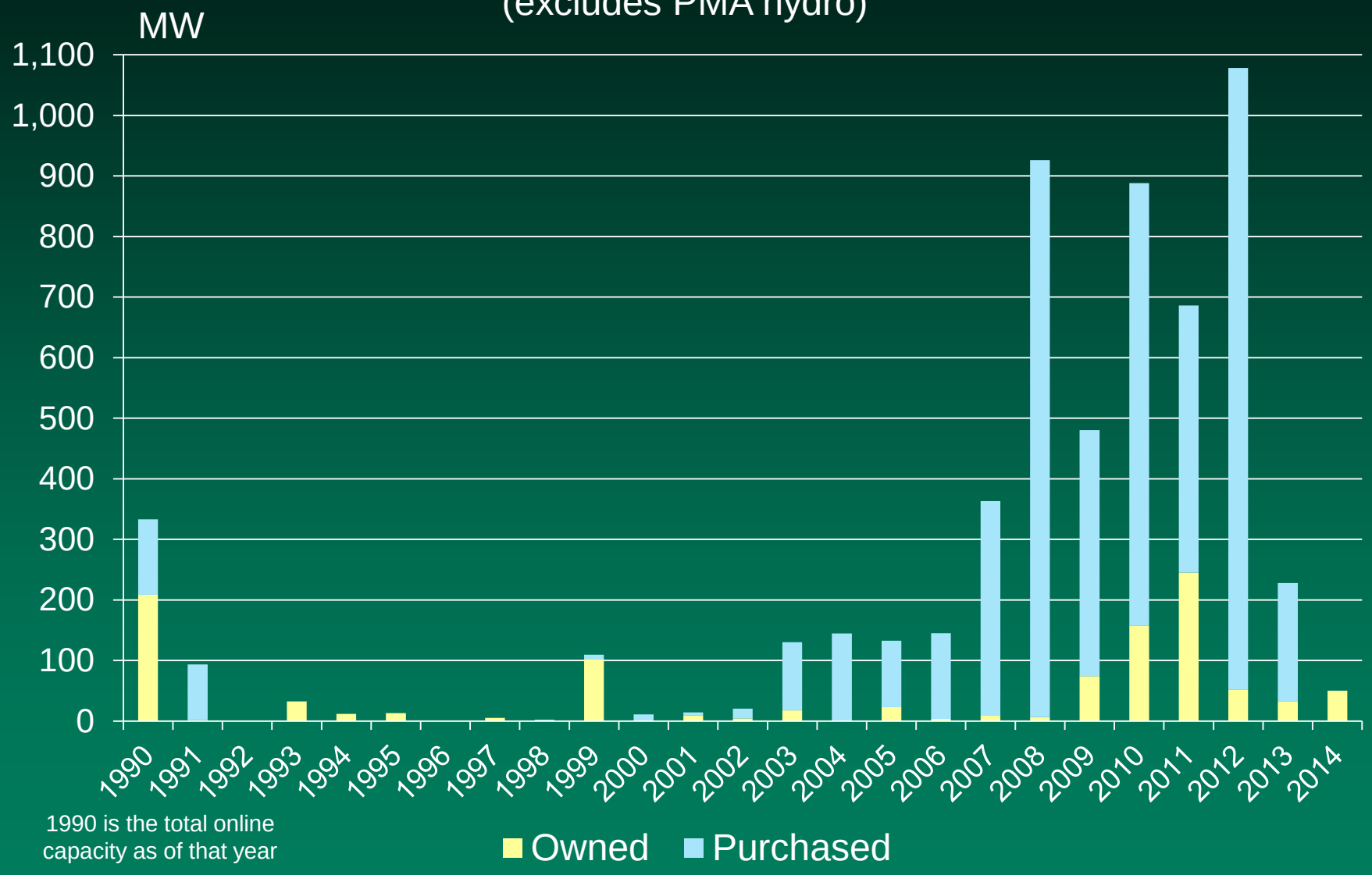
National Rural Electric Cooperative Association

A Touchstone Energy® Cooperative

Co-op Renewable Additions by Year

by owned capacity or purchased (PPA) capacity

(excludes PMA hydro)



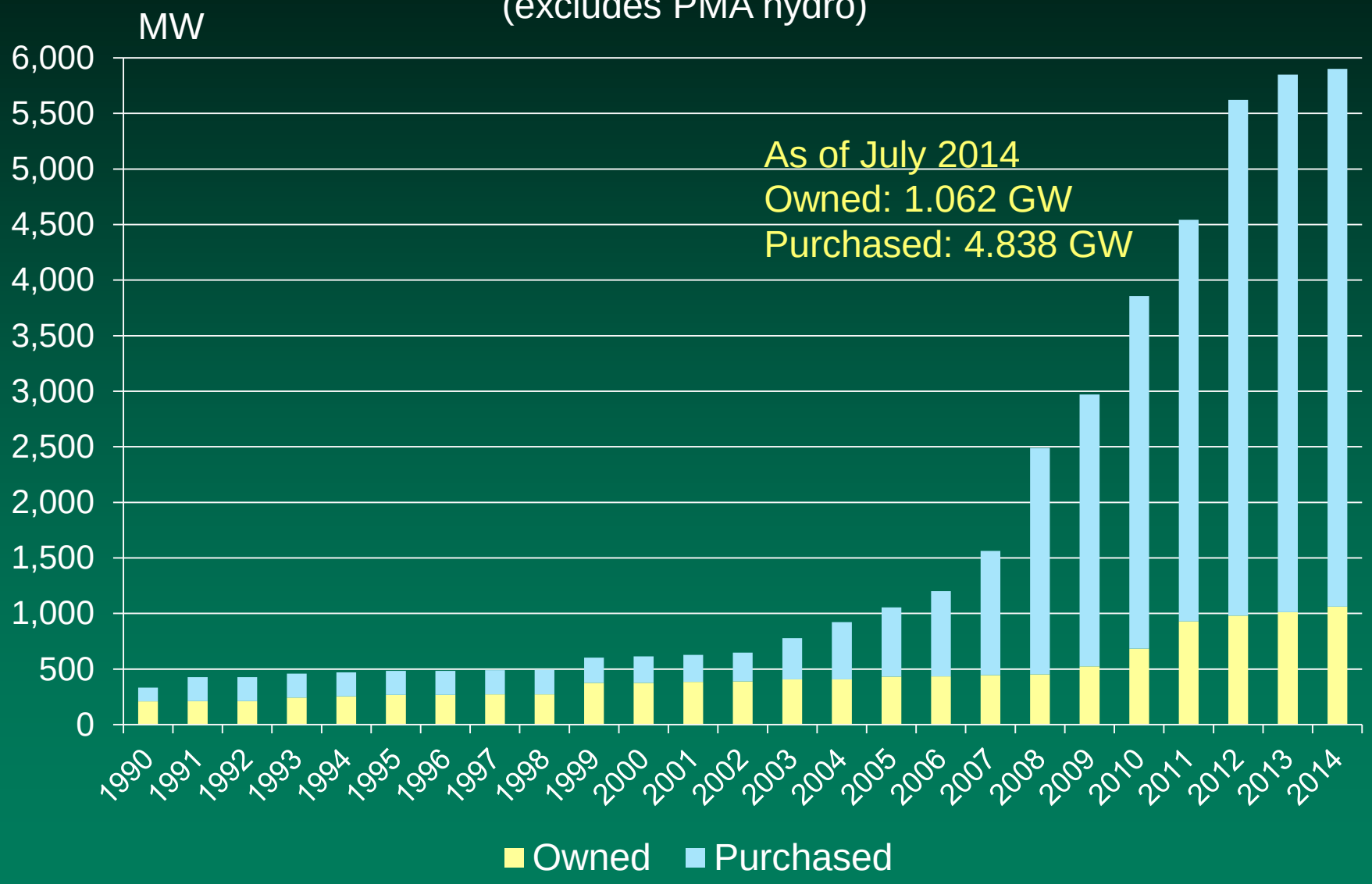
Source: NRECA Strategic Analysis Unit

NRECA – July 2014

Cumulative Co-op Renewable Capacity

by owned capacity or purchased (PPA) capacity

(excludes PMA hydro)



Source: NRECA Strategic Analysis Unit

NRECA – July 2014

Late Edition!

KIUC commissioned the largest solar array in Hawaii:

Cooperatives Cooperating

The NRECA / DOE “SUNDA” Project

- Work with Rural Electric Co-ops to develop tools and processes to reduce barriers to implementation of utility-owned, utility-scale PV systems
- Develop and streamline these “business products” through **implementation of a minimum of 22 MW of PV at 14 co-ops**
- Produce training and outreach materials to reach balance of 900 co-ops plus other interested utilities
- Four year project sponsored by DOE SunShot with 25% matching cost share from co-ops and NRECA

SUNDA Project Strategies

- **Standardized engineering designs to minimize design and engineering costs**
- Volume purchasing program through NRECA's National Discounts Program
- A guide to business plans and financing options in conjunction with Cooperative Finance Corporation (CFC) and NRCO
- Streamlined insurance packages through Federated
- Reduced Labor Costs. Targeting a 25% reduction
- Extensive outreach and training.

Phase 1 projects in design and underway

Next Step: bridge the experience gap

Problem: Some coops taking an ad-hoc approach to PV policy development and execution

- Many G&Ts and statewide's want to help, but lack the tools other than direct human capital.
- Results in inefficiencies, extra cost, lost opportunities, frustrated consumers, frustrated PV developers

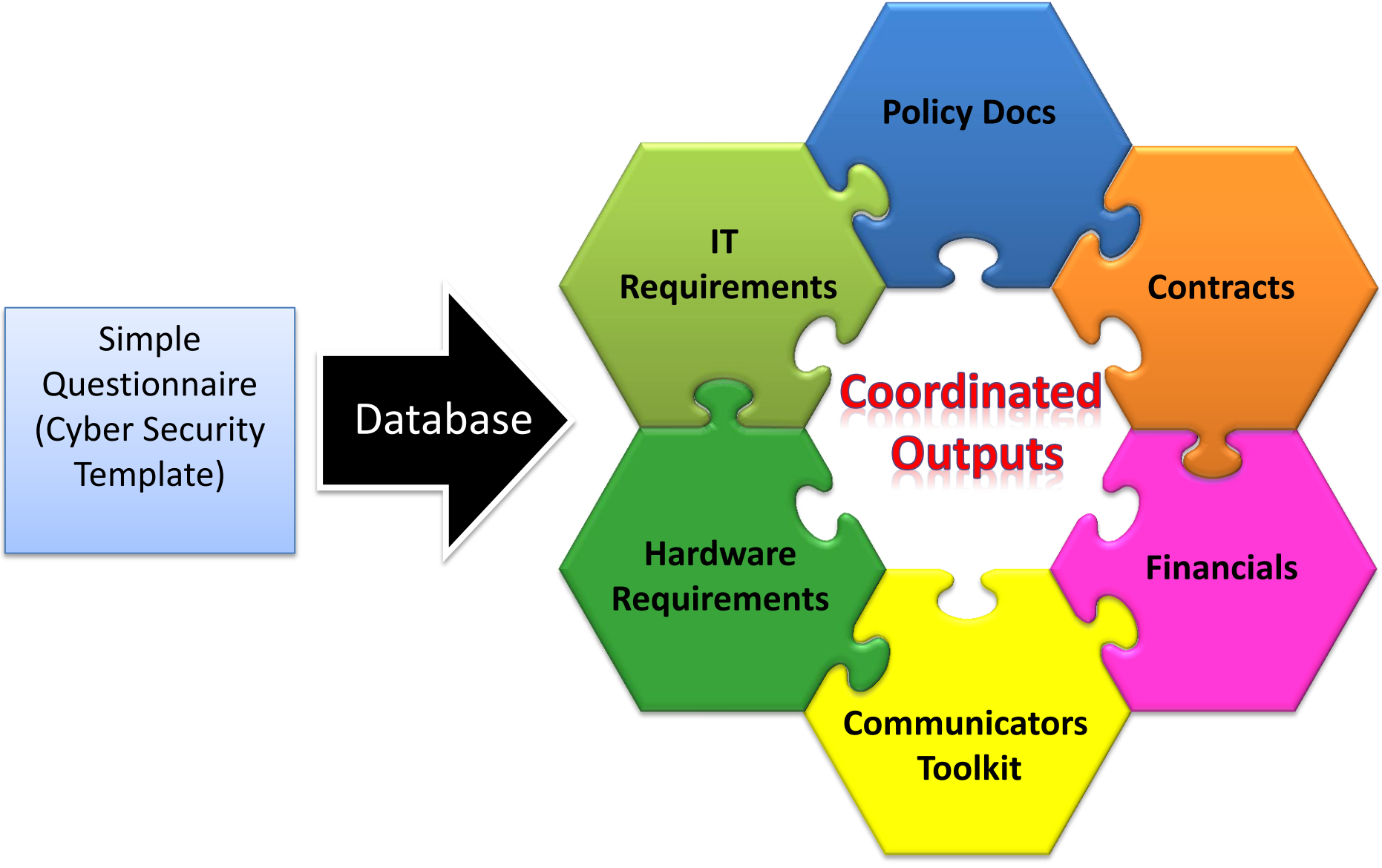
14 Coop Participants

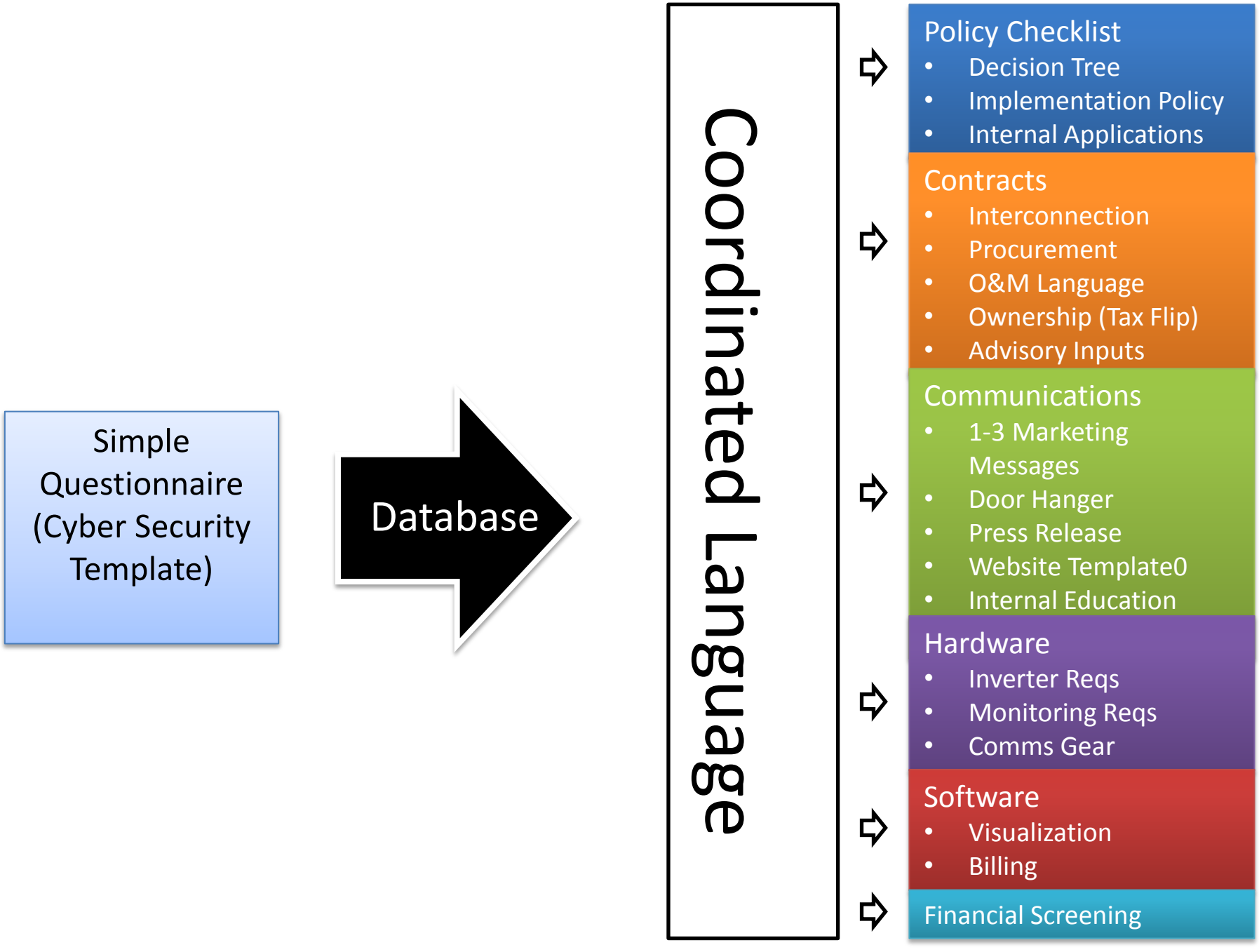
Participating Co-ops	State
Anza Electric	CA
Brunswick EMC	NC
CoServ Electric	TX
Eau Claire EC	WI
Great River Energy	MN
Green Power EMC/ Oglethorpe	GA
North Arkansas EC	AR
Oneida Madison EC	NY
Owen EC	KY
Pedernales EC	TX
Sandhills Utility Services	NC
Sussex Rural EC	NJ
Tri-State G&T Association	CO with options in UT, WY, NM and NE
Vermont EC	VT

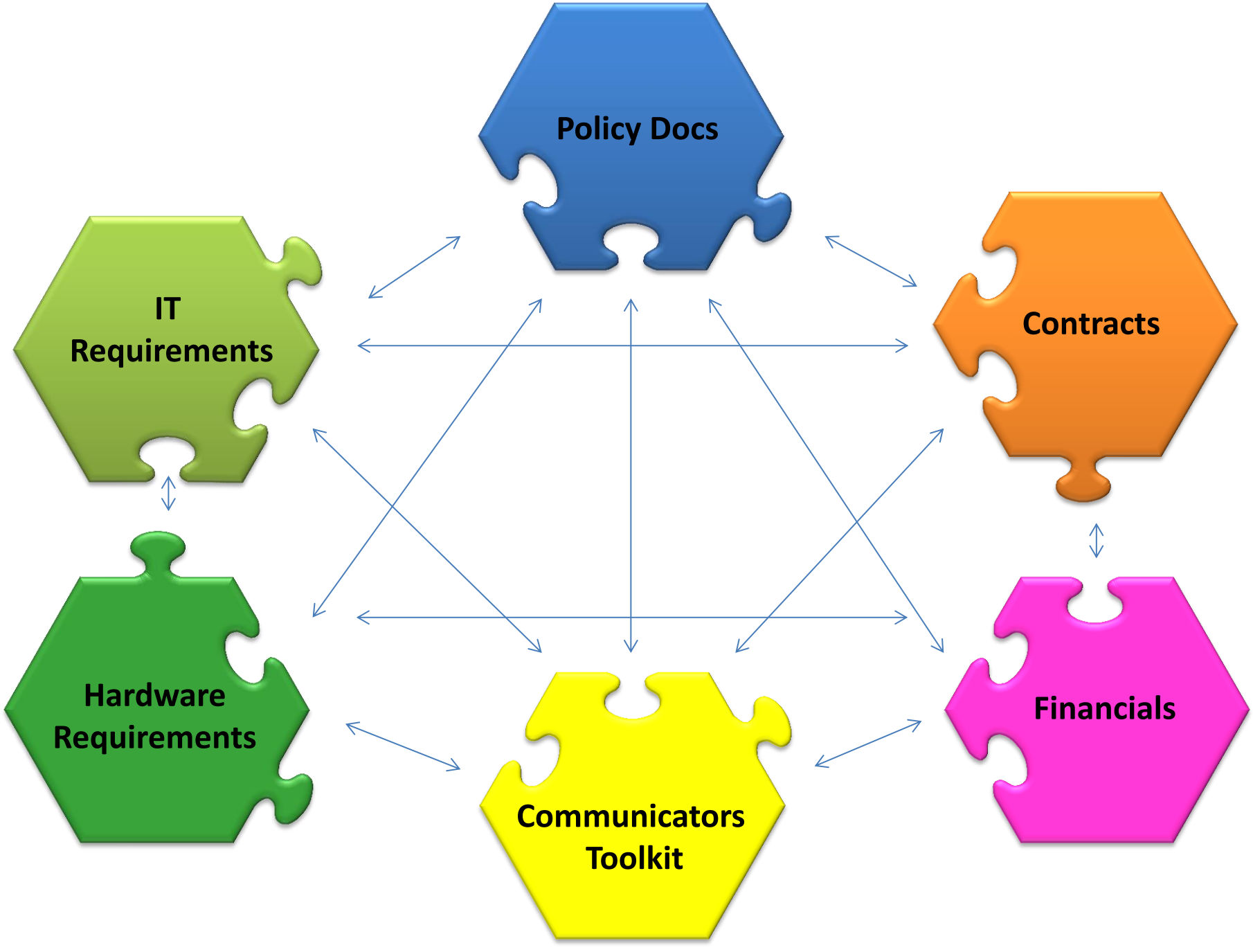
Make replicability even simpler

- Solution: Develop a single-source driven database (modeled after the that Cyber Security Guide) that enables a “Cookie Cutter” approach to PV program implementation across an entire state/system – leading to opportunities for consolidated purchasing, predictable PV policies across systems, and greater communications among systems within a G&T or statewide area. The database will be used to produce:
  - A check list of key documents, and suggested language, that are coordinated in message and contraction implications/obligations
  - Simple screening of impacts of various PV programs and Non-action
  - Simplified and coordinated communications platforms
  - And provide data to the G&T or Statewide organization that enables enhanced long-term planning, procurement, and consistent system-wide policies

Coordinated Outputs




Simple Questionnaire (Cyber Security Template)
Database
Coordinated Language
Policy Checklist
Decision Tree
Implementation Policy
Internal Applications
Contracts
Interconnection
Procurement
O&M Language
Ownership (Tax Flip)
Advisory Inputs
Communications
1-3 Marketing Messages
Door Hanger
Press Release
Website Template0
Internal Education
Hardware
Inverter Reqs
Monitoring Reqs
Comms Gear
Software
Visualization
Billing
Financial Screening


Policy Docs
IT Requirements
Contracts
Hardware Requirements
Financials
Communicators Toolkit

Pathways Software Product.

- A Single Source database:
  - Collects key inputs: Rates, tax incentives, interconnection parameters, system size, power costs, legal requirements..etc (this is actually where the most research is needed)
  - Think Turbo Tax

Other NRECA Initiatives

- NRECA PV Case Studies
  - 6-12 Case studies of coops for coops
    - Political
    - Administrative
    - Operation
    - Economics
- NRECA Renewables Map
  - Interactive Web Page
  - Includes articles, and write-ups on the stories behind the deployments
- G&T “Questions to Ask” for initiating PV
- Updating the DG Toolkit

Parting Thoughts

Thank you

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