



U.S. DEPARTMENT OF
ENERGY

Technology Transfer at DOE

Karina Edmonds

Technology Transfer Coordinator

US Department of Energy

March 13, 2012

Goals (As presented 11/2010)

- Improve contractual vehicles
 - Update and streamline WFO and CRADA agreements
 - Create new opportunities to partner with industry
- Inreach
 - Educate tech transfer offices to improve consistency, streamline processes
 - Improve relationships with inventors to increase IP captured, manage expectations
- Outreach
 - Develop interagency relationships to improve coordination, synergies
 - Let industry know we're open for business

TT Activities & Update

- America's Next Top Energy Innovator
- Response to Presidential Memo on Technology Transfer and Commercialization
- TT Execution Plan (EPAAct 2005 sec. 1001(g))
- New Contractual Vehicle
- SBIR TT
- Implementation of Technology Commercialization Fund

America's Next Top Energy Innovator

■ Pilot Program

- Template option agreement for any DOE patent*
 - \$1,000 up-front fee
 - 12 month option
 - 6 month option with a 6 month no cost extension
 - Portfolio of up to 3 patents for a specific technology from a single laboratory
 - Deferral of patent cost for up to 2 years
 - Optional VC mentoring available
 - Showcased at ARPA-E Innovation Summit

*These are patents held by the contractors that manage DOE Laboratories. For DOE owned patents, license agreement with similar terms will be offered.

Round 1: Winners..

- 42 options to 36 companies
- 14 companies in competition
- Over 500K votes on website
- Top three winners (public vote/ internal review)
 - Umpqua Energy (Medford, Oregon)
 - Iowa Powder Atomization Technologies inc.
(Nevada, IA)
 - Vorbeck Materials (Jessup, Maryland)

www.energy.gov/topinnovator



Response to Presidential MEMO: Section 1 & 2: Goals & Measure

- Section 1: Motivation Behind Policy [No response req.]
 - Innovation fuels economic growth & US Competitiveness

- Section 2: Proposed Measures
 - Include TT goals and measures in program and laboratory performance plans
 - Include TT efforts by scientists and technologists in performance reviews
 - Outreach/Inreach (No. of activities per year)
 - Ratio of technology announcements to number of invention disclosures
 - Ratio of invention disclosures to research expenditures at lab/facility per year
 - Ratio of patents issued to patent application (rolling 3-yr average)
 - Ratio of active patents ever licensed/optioned to total active patents
 - No. of new commercialized technologies per FY
 - No. of new startup companies and percent still in business after 3 years
 - Economic contribution of commercialized technologies (\$ value based on royalty)

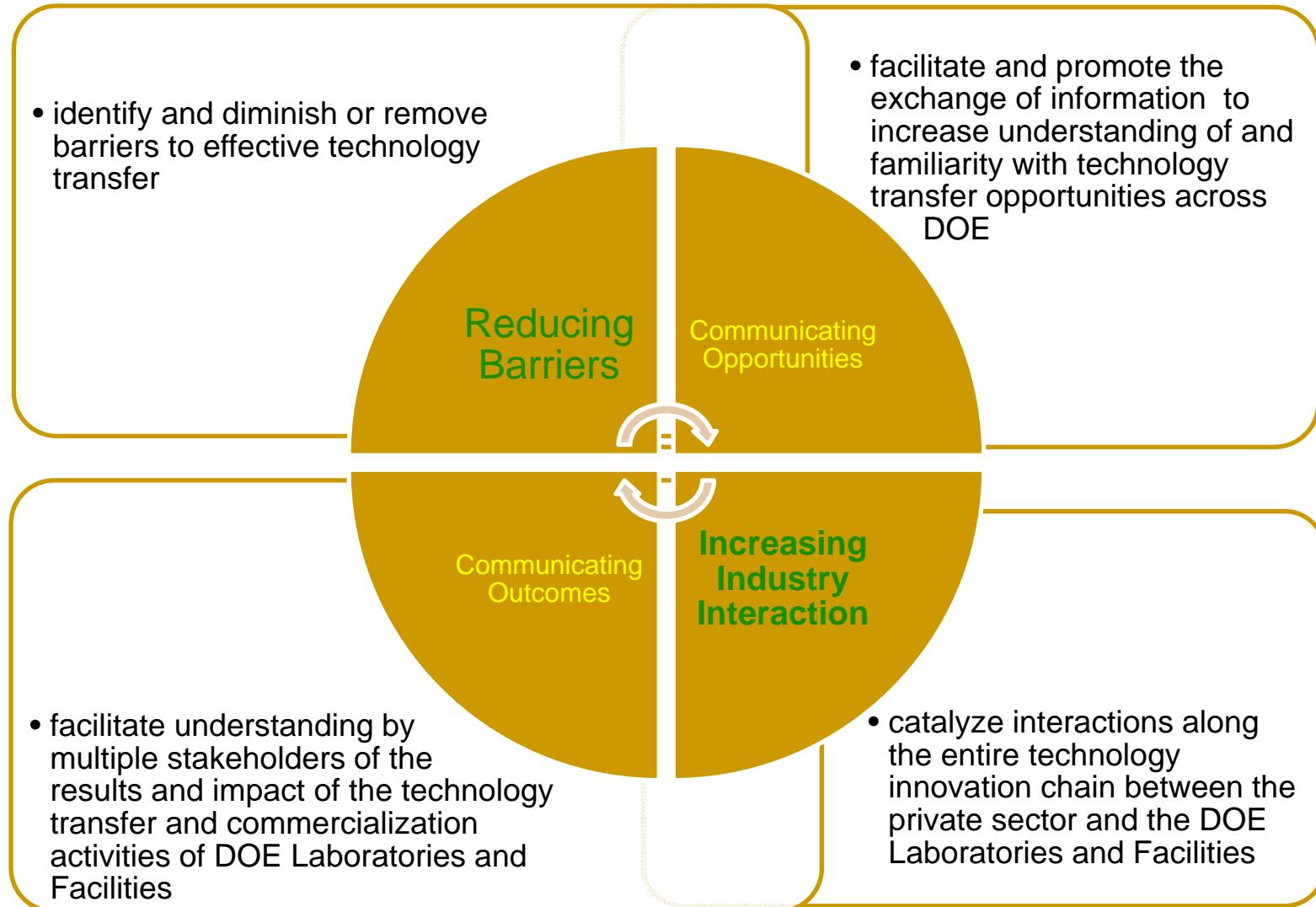
Section 3: Streamlining

- Implementation of ‘Speed of Business Study’
 - Measure: Target a CRADA execution (60-day)
- America’s Next Top Energy Innovator Program
- Advance payment reduction
- Innovation Portal
- SBIR Program (noting SBIR Reauthorization)
 - Compress the award schedule
- Eliminate Phase I-II funding gap
 - More support, flexibility and transparency
 - More private sector reviewers

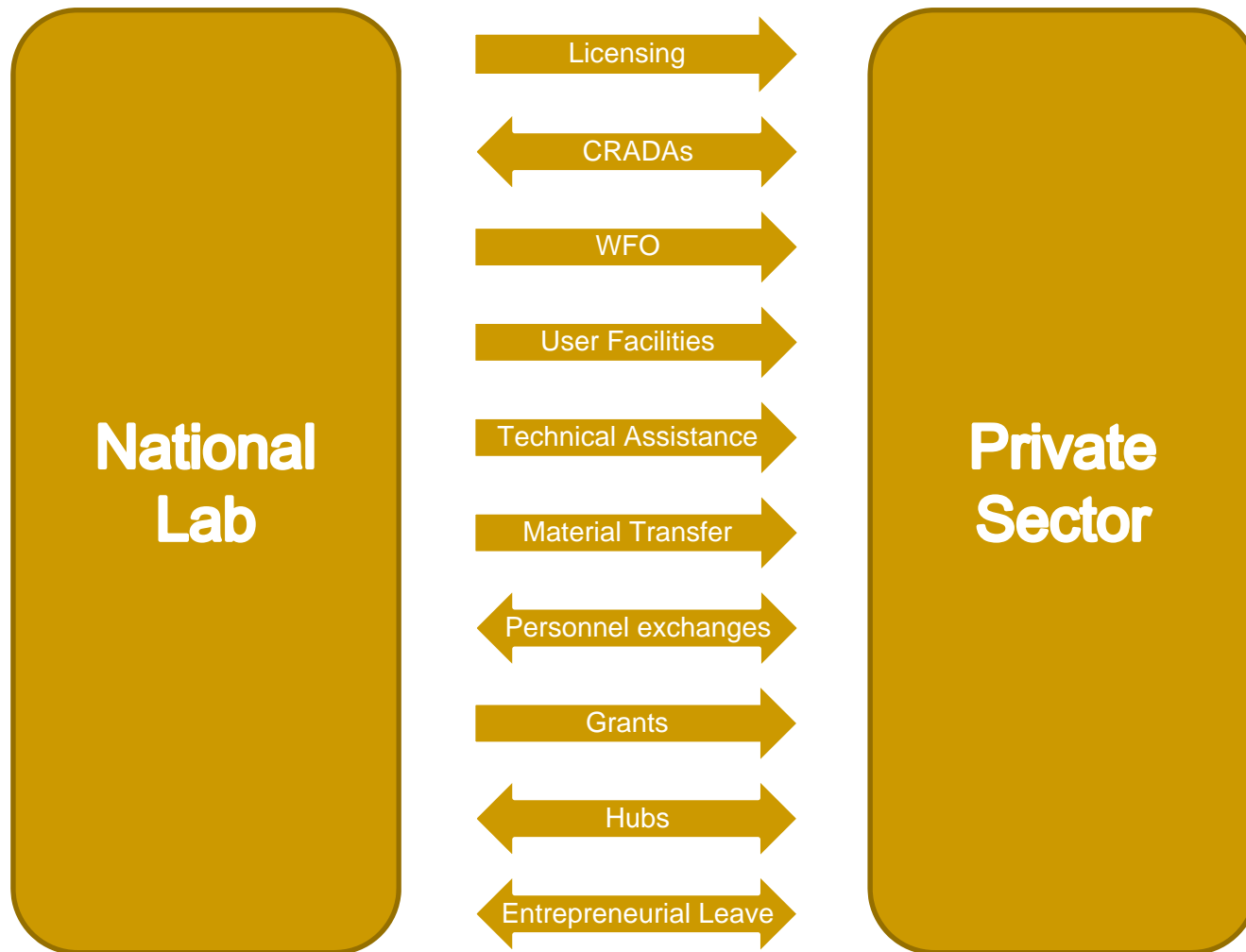
Section 4: Facilitate Commercialization through Local and Regional Partnership

- e-RIC Buildings Hub Cluster (Navy Yard)
- i-6 Green
- Individual Lab Programs (i.e., LANL)
- Asset Revitalization Initiative
- EERE Business Plan Competitions
- Enhanced Use Leasing (EUL) Authority
- DOE has requested authority from OMB
 - Will make a case in memo for EUL
 - Livermore Open Campus

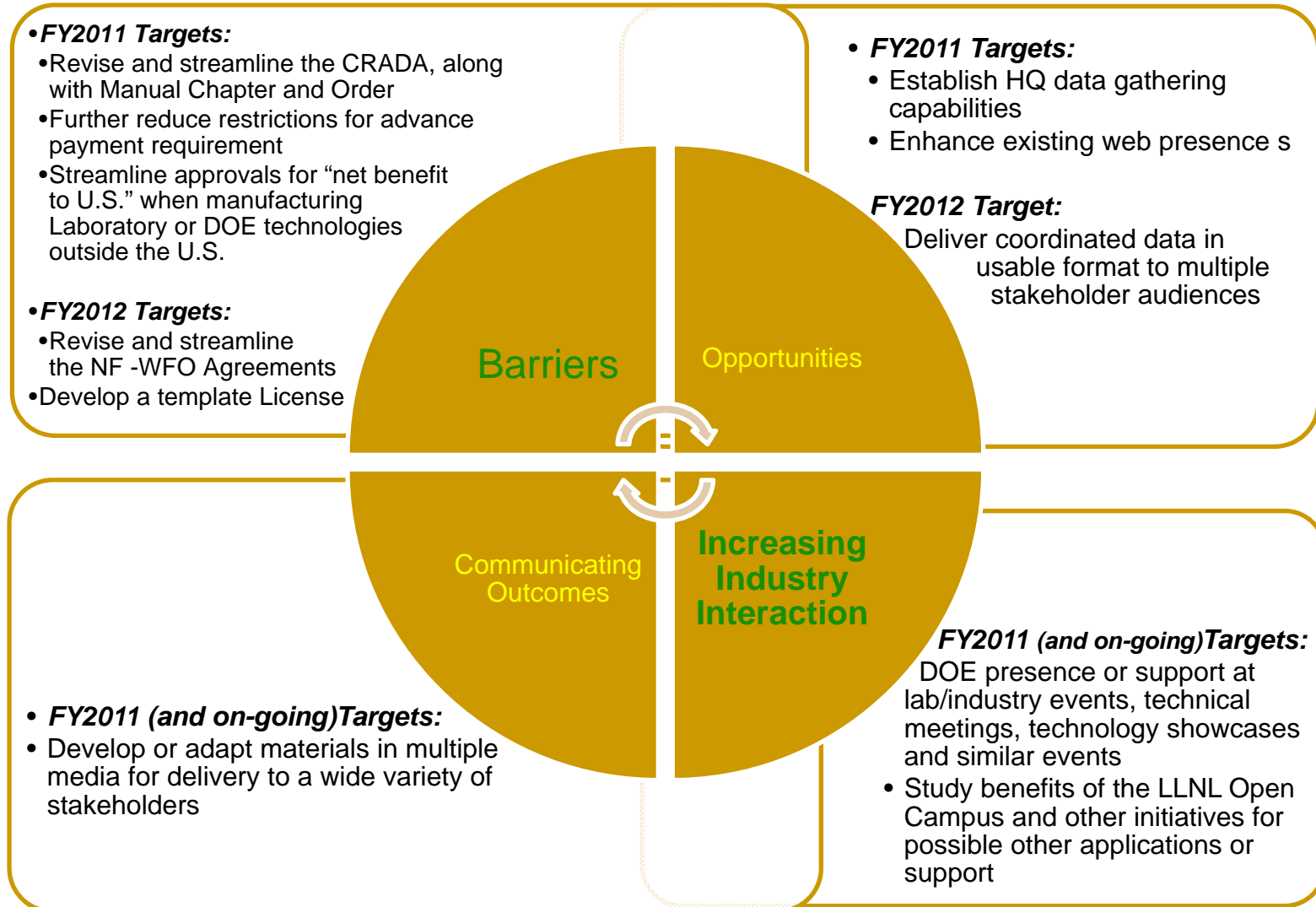
EXECUTION PLAN - GOALS



Interacting With Labs



EXECUTION PLAN - TARGETS



Motivation for ACT

- RFI in 2009
- Engage the private sector in mission-compatible areas
- Better alignment of partnering practices
- Facilitate multi-party collaboration ‘virtual hub’
- Leverage contractor capability and capital
- Complement existing partnering mechanisms
 - CRADAs, WFO, User Facilities, Licensing

Noteworthy Changes

- IP lead negotiated between contractor and sponsor
- Modified “Government Use Rights” possible
- M&O Contractor assumes risk
 - Performance
 - Financial (e.g. Advance Payment)
- “March-in Rights”
- Speed of execution
- M&O Contractor succession provision



U.S. DEPARTMENT OF
ENERGY

	WFO	CRADAs	ACT PILOT
Advance Funding	60 days, with some exceptions or approval by DOE	60 days, with some exceptions or approval by DOE	Level of payment based on existing WFO requirement of full cost recovery to Government. Contractor assumes responsibility for providing advance payment. ACT allows Contractor to be responsible for recovering costs from a Participant
Ownership of Intellectual Property	Sponsor may take title to Lab-made inventions, except in case of federally funded WFO Sponsor or other applicable exceptions	Participant owns its inventions Lab owns its inventions Undivided rights in joint patents - Participant has option to license Lab rights	Contractor and Participant(s) negotiate an IP lead, covered by new patent class waiver
Government Use Rights	Full Government Use Rights	Full Government Use Rights	Limited Government rights for research purposes in many cases
Indemnification	Sponsor indemnifies Government	Participant indemnifies Government	Government indemnification provided by Contractor or Sponsor, as negotiated
Approval Process	CO approves: (A) each WFO proposal (B) each exception to DOE terms and conditions	CO approves: (A) each CRADA proposal (B) each exception to DOE terms and conditions	CO approves each proposal under reasonable best efforts Performance may begin at Contractor risk with preliminary DOE approval CO does NOT approve terms and conditions
Notification of Alternative legal mechanisms	Not applicable	Required if 100% Funds-In	Required includes the relative disposition of IP rights and the costs since these are modified under ACT
Priority of Work	C.O. has authority to reprioritize	C.O. has authority to reprioritize	C.O. has authority to reprioritize
Performance Guarantee	Not applicable	Not applicable	At Contractor's discretion and risk
Substantiation of IP Designation	Upon request of patent counsel	Upon request of patent counsel	Upon request of patent counsel
Successor Contract	Required to accept WFO terms	Required to accept CRADA terms	Required to accept WFO terms May elect to accept project ACT terms if all parties agree Outgoing Contractor may retain ownership of IP if \$20,000 has been invested or if successfully commercialized or deployed
Reporting	Within annual data call	Within annual data call	Additional data to be collected and semi-annual report

Implementation

- Industry sponsor must sign acknowledgment
- New DOE IP Class Waiver
- Applies only to non-federal clients
- No federal funds currently allowed
- Enhanced data rights for government
- Conflict of interest plan must be submitted



Driving Innovation

- Educate scientists/technologies about IP
- Engage entrepreneurs (within and outside)
- Cultivate entrepreneurial environment
- Support small businesses and start-ups
- Empower Tech Transfer Staff to negotiate
- Be facilitator not a gatekeeper
- Be sensitive to business and start-up needs



Get as many technologies out as possible!

How Can STEAB Help?

- Support implementation of TCF
- Be an early adopter
 - Assist in creating a market pull
 - Support start-up creation
- Facilitate outreach
 - Tell constituents about lab resources
 - Technology assistance programs
 - <http://techportal.eere.energy.gov/>
 - <http://techtransfer.energy.gov/>
- Enhanced Use Lease Authority

Thank you!



U.S. DEPARTMENT OF
ENERGY

Department of Energy National Laboratories

