

2017 Program Management Review

Co-Optima Response
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Arlington, Virginia
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Thank You to the Co-Optima Reviewers

DMT

F. Michael McCurdy – ICF Inc.

Andrea Slayton – Slayton Consultants

A&S

Troy Hawkins – Eastern Research Group, Inc.

Candace Wheeler – General Motors (Ret.)

Conversion

Brandon Emme – ICM, Inc.

Phillip Marrone – Leidos

Portfolio Strengths



- Potential value and impact of work is clear
 - Benefits of fuel properties database and modeling/simulation tools
- Innovative collaborative approach undertaken by national Labs
- Numerous synergies within BETO/VTO
 - Spillover benefits to both transportation and biofuels sectors
- Poised to generate wealth of new data
- Allows for fuels and engine technologies to mature in development together





Co-Optima Organization



Board of Directors

(Labs and DOE)
Approve direction and changes
in focus

Steering Committee

POC for each lab, communications, IP

Operations

Project management, project integration, and strategic consulting

Leadership Team

(Labs and DOE)

Establish vision, define strategy, integrate work plan, oversee execution, evaluate performance, engage stake holders, and team build

External Advisory Board

Advise on technology and direction, provide recommendations, bridge to stakeholders

Technical Teams

Plan and execute projects, report monthly highlights and quarterly progress

Simulation Toolkit Development Advanced Engine Development

Fuel Properties

High Performance Fuels

ASSERT

Market Transformation

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High Performance Fuels

ASSERT

Market Transformation

Co-Optima Funding



Teams	FY16 Budget	FY17 Budget
Task A: High Performance Fuels	\$9,500	\$7,100
Task B: ASSERT	\$2,200	\$2,200
Task C: Market Transformation	\$1,400	\$1,400
Task D: Co-Optima Leadership Team	\$1,200	\$1,100
Total	\$14,000	\$12,000

3.7% of total BETO Budget Budget shown in \$K



Co-Optimization of Fuels & Engines

	FY16 Budget	FY17 Budget
ВЕТО	\$14,000	\$12,000
VTO	\$12,000	\$12,500
Total	\$26,000	\$24,500

Recommendation #1



RECOMMENDATION: Develop a Risk Matrix for Thrust I Market Transformation

- Co-Optima project could benefit from producing a risk matrix of the adoption risks and then adjusting near term work to mitigate the risks described
- More emphasis in strategic planning for Market Transformation area as handoff from Co-Optima to the private sector

RESPONSE:

- Will develop risk matrix
- Working to develop a program-level vision for market transformation that fits into the early TRL focus
- Restructuring market transformation activities to sharpen impact

Recommendation #2



RECOMMENDATION: Source Candidate Materials from BETO Conversion & DMT Teams

- Sourcing materials from DMT and Conversion portfolio partners could free up resources which could be redirected into strengthening the dataset and Market Transformation efforts
- Opportunities exist for better integration with the BETO DMT and Conversion programs

RESPONSE:

- Working with Conversion team to coordinate efforts, understand linkages and ensure no duplication
- Sourcing molecules and fuel mixtures from commercial source and using surrogates when possible for cost effectiveness
- Source from Conversion & DMT projects when cost and timing allow

Recommendation #3



RECOMMENDATION: Add Regulatory Issues to the ASSERT Models

 Models address environmental and economic issues well, addition of a regulatory block within the models could make them much more robust.

RESPONSE:

- Regulatory issues addressed implicitly through policy and regulatory variables in ASSERT Models (BSM, ADOPT)
- No current plans to develop new models
- Considering bringing market transportation analysis under ASSERT