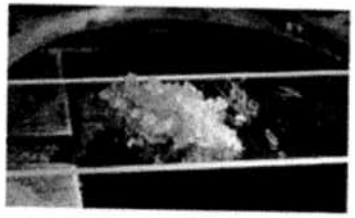
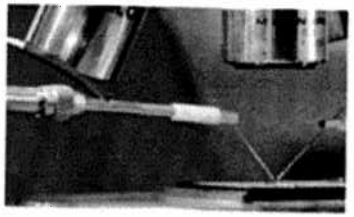


MICHIGAN
ECONOMIC DEVELOPMENT CORPORATION
THE UPPER HAND



MICHIGAN ECONOMIC DEVELOPMENT CORPORATION
MichiganAdvantage.org

Michigan Energy Storage Strategic Attraction/Growth Strategy

House Energy & Technology Committee
The Honorable Jeff Mayes, Chair

February 2, 2010

Centers of Energy Excellence

- 2008 SB 1380 / PA 175 was signed into law July 8, 2008.
- Authorized **$45 Million** grant program, awards made by the **Michigan Strategic Fund.**
- Objective was to partner private sector, universities, and government to commercialize innovative energy technologies - where Michigan has competitive advantages in such areas as:
  - Workforce
  - Intellectual Property
  - Natural Resources
- Assigned to areas where there are technical or supply chain issues that prevent commercialization.
- Focused on areas which have impact on Michigan's:
  - Energy security
  - Environmental profile
- Potential for significant economic impact.
- Potential to leverage **significant federal dollars.**

Centers of Energy Excellence: Phase 2

- 2009 SB 418 / PA 144 was signed into law November 13, 2009. Authorizes an additional **$30 Million** grant program to promote the development, acceleration, and sustainability of "energy excellence sectors" in Michigan.
- Grants awarded only to for profit companies.
- Requires inclusion of institution of higher learning or **National Lab**
- Grants only awarded for **all** of the following purposes:
  - Providing up to a 1-for-1 match for **federal funding** of up to 50% of the total project costs.
  - Supplementing in-kind contributions provided by a person or entity other than this state.
  - Accelerating the commercialization of an innovative energy technology or process that will be ready to market within 3 years of the effective date of the agreement.
  - Activities of the center, including, but not limited to, workforce development and technology demonstration.

Michigan Advanced Battery Credits

- 2008 HB 6611 / PA 580 was signed into law January 14, 2009. It was amended by SB 319 / HB 4515, and later by SB 777.
- Total value of credits: **$ 1 Billion**.
- Provides **refundable credits** on the Michigan Business Tax for battery cell manufacturing, vehicle battery pack assembly, and advanced battery engineering, designed to make Michigan the battery capitol of North America.
- The **Michigan Economic Growth Authority** is responsible for entering into agreements for tax credits available through this program.
- Potential to leverage **significant federal dollars**.

Strategy

- Seed MI marketplace with key battery technology players (Centers of Energy Excellence) – be first to market in projected $20 Billion North American marketplace by 2020.
  - Completed July, 2008
- Develop incentives to attract key anchor/magnet companies to spur value chain growth (Battery Cell/Pack/R&D Credits)
  - Completed
- Develop tools to provide incentives for anchor companies to assist in growing the entire value chain in MI (Anchor Credits)
  - Completed
- Develop incentives that the DOE would recognize as cost share in Federal funding opportunities
  - Completed
- Assist OEMs in offsetting the incremental cost of vehicle electrification to minimize consumer impact and 'dovetail' IRC 30D credits
  - Completed
- Expose battery companies to market opportunities in grid stability, defense and renewable energy sectors (Alliance Model)
  - Ongoing

Michigan's Stimulus for Advanced Batteries
$1 Billion Program

Cell Manufacturing

Johnson Controls / SAFT
$100 Million

LG Chem / cpi compact power, inc.
$100 Million

A123 SYSTEMS
$100 Million

DOW KOKAM
$100 Million

Xtreme Power
$100 Million

fortu Holding AG
$100 Million

Pack Manufacturing

GM
$115 Million

Ford
$78 Million

Johnson Controls / SAFT
$20 Million

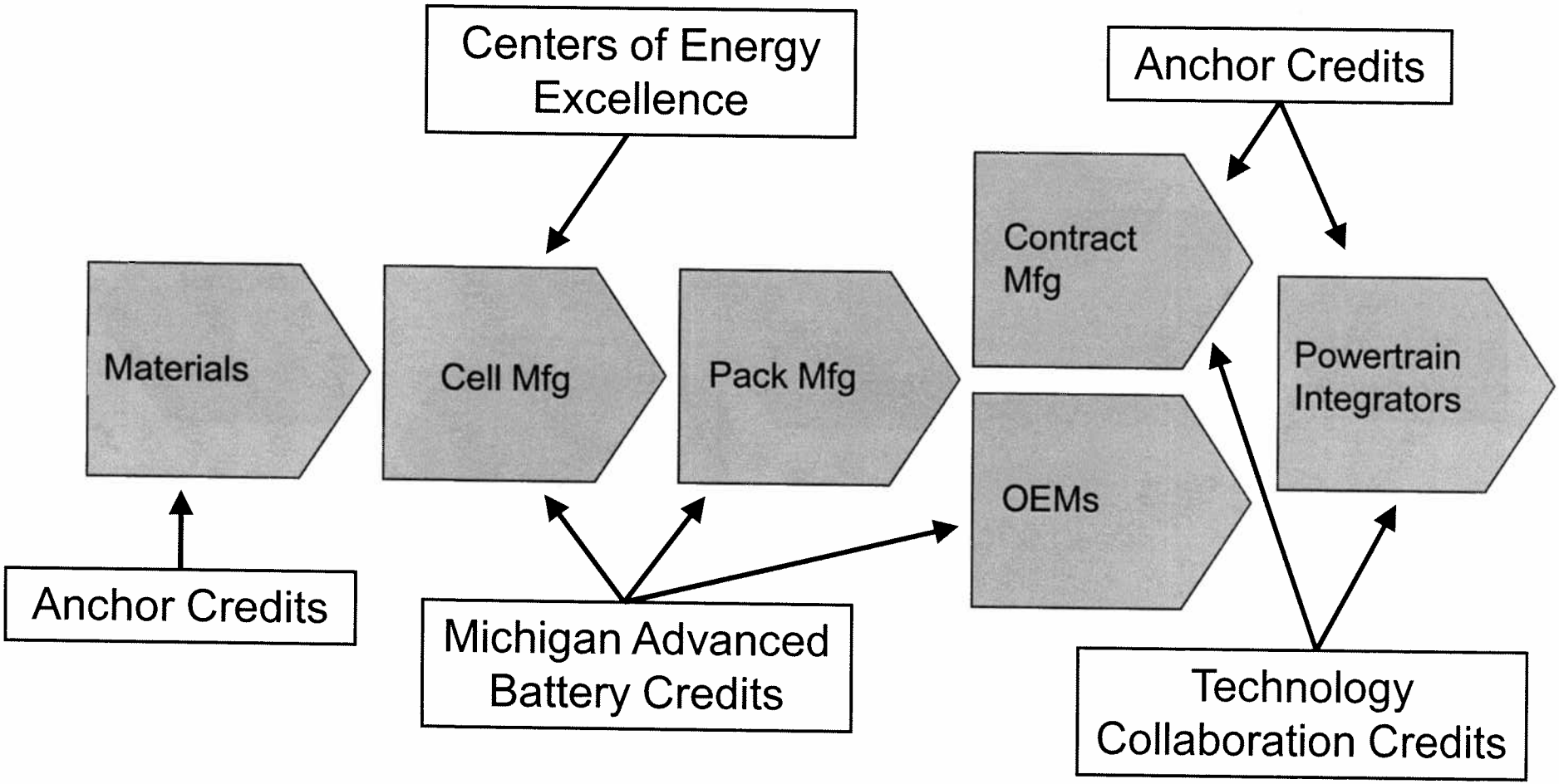
Battery & Vehicle Engineering

GM
$45 Million

Ford
$75 Million

CHRYSLER
$45 Million

Battery Value Chain Demonstration



Location of Projects

- Cell manufacturing locations
  - Holland (2)
  - Midland
  - Livonia / Romulus
  - Muskegon
  - Novi
  - Ann Arbor
- Value chain company locations
  - Oak Park
  - Grand Blanc
  - Northville
  - Battle Creek

Status Summary (cont.)

- Federal opportunities
  - ~$900M in outstanding federal loan program applications
    - DOE Advanced Technology Vehicles Manufacturing (ATVM)
    - DOE 1703/1705 loan/loan guarantee program
  - ARPA-E grants
    - DOE grants for advanced battery technologies
    - Award size is $3M to $5M
    - Multiple MI companies are applying
    - Early application review period ends in March

Thank You

Michigan Economic Development Corporation

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