

MINUTES OF THE MEETING
OF THE
MICHIGAN STATE UNIVERSITY
BOARD OF TRUSTEES

October 30, 2015

President Simon called the meeting of the Board of Trustees to order at 9:30 a.m. in the Board Room.

Trustees present: Brian Breslin, Dianne Byrum, Joel Ferguson, Melanie Foster, Mitch Lyons, Brian Mosallam, George Perles, and Diann Woodard.

University officers present: President Simon, Provost and Executive Vice President Youatt, Executive Vice President Udpa, Vice President and Secretary Beekman, Vice President and General Counsel Noto, Vice Presidents Burnham, Gore, Groves, Haas, Hsu, Maybank, and Swain, and Senior Advisor and Director Granberry Russell. Faculty liaisons present: John Bell, Martin Crimp, Ramona Fernandez, Mariam Sticklen, and Mary Noel. Student liaisons present: Brian Batayeh, Domonique Clemons, Amanda Hohly-Seng, and Sudha Sankar.

All actions taken were by unanimous vote of the Trustees present, unless otherwise noted.

1. On a motion by Trustee Foster, supported by Trustee Mosallam, the **BOARD VOTED to approve** the agenda.
2. On a motion by Trustee Mosallam, supported by Trustee Lyons, the **BOARD VOTED to approve** the minutes of the June 17, 2015 Board of Trustees meeting.
3. President's Report

President Simon provided the following report to the Board.

A. Sustainability Highlights

In April 2015, MSU announced that it would stop burning coal by the end of 2016, and would switch to natural gas as the primary fuel source. The University's final coal delivery arrived in September 2015. Cleaner fuel will also extend the life of the power plant and avoid about \$4.5 million in capital costs.

Since 2009-10, MSU's greenhouse gas emissions have been reduced 25.2 percent, and its renewable energy portfolio has grown

by 8.5 percent.

In September 2015, MSU's Board of Trustees approved a plan to install solar arrays on campus.

MSU was nominated for an inaugural Governor's Energy Excellence Award for its achievement in energy efficiency as part of the Better Buildings Challenge.

MSU diverted 60 percent of its waste in 2014-15, preventing over 19 million pounds of material from entering landfills and reducing costs to many University operations.

MSU Recycling won awards from the Michigan Recycling Coalition and National Recycling Coalition in the past year for its performance, operational excellence, and achievement in landfill diversion rates.

To date, nearly \$120,000 has been provided for on-campus student sustainability research and projects through the Be Spartan Green Student Project Fund.

The MSU Sustainability Fellows Program awarded \$150,000 in its first year to faculty conducting research projects specifically designed to improve sustainability on campus.

B. Student Achievements

Five Michigan State University students have been nominated for major graduate school scholarship awards:

Sarah Kovan, Irene Li, Aaron Oom, and Lauren Straley, all Honors College seniors, have been nominated for the Rhodes Scholarship. Li and Oom have also been nominated for the Marshall Scholarship, while Kovan and Andrew Pomaville, a senior in the College of Social Science, have also been nominated for the Mitchell Scholarship.

The MSU debate team is off to a strong start, finishing in the top 16 out of 122 teams in its first competition, the Georgia State National College Debate Tournament. Earlier this month the team won the Kentucky Round Robin, an elite event in which only nine of the top teams in the country compete.

C. University-wide Rankings and Awards

MSU recently celebrated more than 50 years of leading edge nuclear physics research on our campus. The first cyclotron, the K50, went online in 1965.

In its 4th annual ranking of top online graduate schools, graduateprograms.com ranked MSU as number two nationwide for its graduate programs, based on responses from more than 75,000 students in over 1,600 graduate programs across the country.

WKAR-FM radio was named Noncommercial Station of the Year at the 2015 National Association of Broadcasters' Marconi Radio Awards. The NAB is the premier advocacy association for America's broadcasters.

Former President Bill Clinton, the first recipient of the Spartan Statesmanship Award for Distinguished Public Service, will be the keynote speaker at the Governor Jim Blanchard Public Service Forum on November 18 at the Kellogg Center.

The award and forum were established through a \$1 million gift to MSU from Governor Blanchard and his wife, Janet. The program will honor distinguished leaders in politics, diplomacy, public service, and journalism.

D. Faculty Achievements

Geological Sciences associate professor Julie Libarkin was recently elected a 2015 Fellow of the Geological Society of America.

Geological Sciences professor Bruno Basso was recently elected a 2015 Fellow of the Soil Science Society of America.

Christie Bahlai, an MSU entomologist, has been selected as one of the first four Mozilla Fellows for Science, a new opportunity for researchers to influence the future of open science and data sharing within their communities.

Astronomer Jay Strader has been named a fellow of the David and Lucile Packard Foundation, a prestigious award that honors early-career scientists. This is the first time that a faculty member at MSU has won this award.

MSU researcher Joan Rose has been named an honorary citizen of Singapore for her significant contributions in developing a safe and sustainable water system in the island nation. For the last 14 years, Rose has worked with researchers and government officials in Singapore to help build the country's water infrastructure and monitor water quality.

Assistant Professor Kristin Parent is one of four early-career women scientists nationwide to receive \$50,000 grants to kick-start their academic research careers. These grants are the first presentation of the Marion Milligan Mason Awards for women in the chemical sciences, administered by the American Association for the Advancement of Science.

The American Society of Employers has named Sharon Butler one of Michigan's Human Resource Executives of the Year. Butler, Assistant Vice President for Human Resources at MSU, has more than 35 years of experience in human resources.

E. Athletics

The women's golf team finished the fall season in record setting fashion this past Sunday, shooting a 13-under-par 275 in the final round of the Landfall Tradition tournament in North Carolina. It was the lowest single round score for the team in program history.

Individually, sophomore Sarah Burnham won the tournament by one stroke, equaling her school record with a 6-under-par score of 66 in her final round.

4. There was no Public Participation on Issues Germane to the Agenda.
5. Personnel Actions

Provost Youatt presented the following personnel actions:

Klausner, James F, AN-MSU Foundation Professor, Department of Mechanical Engineering, \$ 240,000, with Tenure, effective January 1, 2016.

Valburg, Stephanie J, AN-Professor, Mary Anne McPhail Dressage Chair in Equine Sports Medicine, Department of Large Animal Clinical Sciences, \$ 198,000, with Tenure, effective November 1, 2015.

Trustee Byrum **moved to approve** the recommendations, with support from Trustee Mosallam.

THE BOARD VOTED to approve the resolution.

6. Gifts, Grants, and Contracts

Vice President Hsu introduced Professor Charles W. (Andy) Anderson, a member of the Department of Teacher Education in the College of Education. Professor Anderson made a presentation to the Board on the carbon time project. (Appendix A)

7. Finance Committee

Trustee Foster presented the Trustee Finance Committee Report and recommendations.

A. 2016-17 Appropriation Request and Capital Outlay

It was recommended that the Board of Trustees adopt Michigan State University's 2016-17 Operating and Capital Outlay Request, including components for the University General Fund, AgBioResearch, and Michigan State University Extension.

BE IT RESOLVED, the Board of Trustees hereby adopts the attached 2016-17 Appropriation Request and Capital Outlay.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Byrum.

THE BOARD VOTED to approve the resolution.

B. New Investment Manager—Marble Arch Investments, LP

It was recommended that the Board of Trustees select Marble Arch Investments, LP as an investment manager in the Common Investment Fund's hedge funds asset class.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby appoints Marble Arch Investments, LP as an investment manager.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Breslin

THE BOARD VOTED to approve the resolution.

C. **New Investment Manager—Roystone Capital Management LP**

It was recommended that the Board of Trustees select Roystone Capital Management LP as an investment manager in the Common Investment Fund's hedge funds asset class.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby appoints Roystone Capital Management LP as an investment manager.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Breslin.

THE BOARD VOTED to approve the resolution.

D. **Long-Term Lease with Spectrum Health**

It was recommended that the Board of Trustees authorize the Administration to negotiate and execute a lease with Spectrum Health Hospitals for up to 14,000 square feet of unfinished office space at the Secchia Center in Grand Rapids, Michigan.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to enter into a lease with Spectrum Health Hospitals for a term of 10 or more years and upon such other terms and conditions as may be acceptable to the Executive Vice President for Administrative Services.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Woodard.

THE BOARD VOTED to approve the resolution.

E. **Long-Term Lease with American Lightweight Materials Manufacturing Innovation Institute**

It was recommended that the Board of Trustees authorize the Administration to negotiate and execute a lease for approximately 45,400 square feet of office and high-bay space at 1400 Rosa Parks Boulevard, Detroit, Michigan (Corktown Facility).

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to enter into a lease

with American Lightweight Materials Manufacturing Innovation Institute (ALMMII) for a term greater than ten years, and upon such other terms and conditions as may be acceptable to the Executive Vice President for Administrative Services.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Mosallam.

THE BOARD VOTED to approve the resolution.

F. Authorization to Plan—Music Practice Building—Replace Windows

It was recommended that the Board of Trustees authorize the Administration to plan for replacement of windows and related items in the Music Practice Building.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to plan for the project entitled “Music Practice Building—Replace Windows”.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Ferguson.

THE BOARD VOTED to approve the resolution.

G. Authorization to Plan—Commuter Parking Lot 89—Reconstruct Southeast Section

It was recommended that the Board of Trustees authorize the Administration to plan for reconstruction of a portion of commuter parking lot 89 to repair significant deterioration and remove safety hazards.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to plan for the project entitled “Commuter Parking Lot 89—Reconstruct Southeast Section”.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Breslin.

THE BOARD VOTED to approve the resolution.

H. Authorization to Plan—Strategic Academic Development Initiative—STEM Teaching and Learning and Interdisciplinary Research Facilities

It was recommended that the Board of Trustees authorize the Administration to plan for an additional space to accommodate significant growth in science technology, engineering, and mathematics (STEM) enrollments and research.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to plan for the project entitled “Strategic Academic Development Initiative—STEM Teaching and Learning and Interdisciplinary Research Facilities”.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Byrum.

THE BOARD VOTED to approve the resolution.

I. Project Approval—Authorization to Proceed—Hubbard Hall—Exterior Masonry Repair (phase I)

It was recommended that the Board of Trustees authorize the Administration to proceed with the first phase of exterior renovations to Hubbard Hall.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to proceed with the project entitled “Hubbard Hall—Exterior Masonry Repair (phase I)”, with a project budget of \$3,000,000.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Lyons.

THE BOARD VOTED to approve the resolution.

J. Project Approval—Authorization to Proceed—Breslin Student Events Center—Facility Upgrades

It was recommended that the Board of Trustees authorize the Administration to proceed with facility upgrades, an expansion of the facility, and the addition of a hall of history at the Jack Breslin Student Events Center.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to proceed with the project entitled “Breslin Student Events Center—Facility Upgrades”, with a project budget of \$50,000,000.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Woodard.

THE BOARD VOTED to approve the resolution.

K. Project Approval—Authorization to Proceed—Food Processing and Innovation Center

It was recommended that the Board of Trustees authorize the Administration to proceed with renovations and an addition at the Engineering Research—Hulett Road building to support the establishment of the Food Processing and Innovation Center (FPIC).

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby authorizes the Administration to proceed with the project entitled “Food Processing and Innovation Center”, with a project budget of \$6,400,000.

Trustee Foster **moved to approve** the recommendation, with support from Trustee Mosallam.

THE BOARD VOTED to approve the resolution.

8. Policy Committee

Trustee Byrum presented the Trustee Policy Committee Report and recommendations.

A. Elimination of the Anti-Discrimination Judicial Board and Approval of Revisions to the Anti-Discrimination Policy

It was recommended that the Board of Trustees disband the Anti-Discrimination Judicial Board and authorize future changes to the University’s Anti-Discrimination Policy.

BE IT RESOLVED, that the Board of Trustees hereby disbands the Anti-Discrimination Judicial Board and authorizes the Administration to revise the University’s Anti-Discrimination Policy (ADP) to reflect this change; and be it further

RESOLVED, that the Board of Trustees authorize the Provost to make any changes necessary to conform the ADP to the recent resolution agreement with the U.S. Department of Education, Office of Civil Rights; and be it further

RESOLVED, that the Board of Trustees authorize the Provost to make any conforming changes to other University policies that are necessary following this Board action and to make editorial changes that become necessary over time to update the contact and administrative information listed in the ADP.

Trustee Byrum **moved to approve** the recommendation, with support from Trustee Ferguson.

THE BOARD VOTED to approve the resolution.

B. Approval of Contract Terms

It was recommended that the Board of Trustees approve a contract between Michigan State University and *Black Pine Engineering, LLC*, a company in which faculty member Dr. Norbert H. Mueller holds a financial interest.

BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby approves an option agreement extension with *Black Pine Engineering, LLC*, consistent with earlier public notice given at a Board meeting and with an "Option Agreement Extension Term Sheet" presented to the Board. (Appendix B)

Trustee Byrum **moved to approve** the recommendation, with support from Trustee Lyons.

THE BOARD VOTED to approve the resolution.

C. Notice of Intent to Negotiate Contracts

Pursuant to State law, Trustee Byrum gave public notice of the University's intent to negotiate contracts with *Cultural Intelligence Center, LLC*, a Michigan limited liability company. Dr. Linnea Van Dyne, a Professor in the Department of Management, and members of her family have, or have options to buy, an interest in the company.

Pursuant to State law, Trustee Byrum gave public notice of the University's intent to negotiate contracts with *Life Blood Corp.*, a Delaware corporation. Dr. Eric Robert Eggenberger, a Professor in the Department of Neurology & Ophthalmology, Dr. Dana Spence, and Associate Professor in the Department of Chemistry, and members of their families have, or have options to buy, an interest in the company.

Pursuant to State law, Trustee Byrum gave public notice of the University's intent to negotiate contracts with *Maven Business Development, LLC*, a Michigan limited liability corporation. Dr. William Donohue, a Professor in the Department of Communication, Dr. Charles Owen, an Associate Professor in the Department of Computer Science and Engineering, and Dr. Richard Spreng, an Associate Professor in the Department of Marketing, and members of their families have, or have options to buy, an interest in the company.

9. Audit Committee

Trustee Breslin presented the Trustee Audit Committee Report and recommendations.

The Audit Committee met and reviewed with MSU staff and the Board's external auditors, Plante Moran, the 2014-15 audited financial statements.

The University received a clean opinion from the auditors, which indicates that MSU followed accounting rules appropriately and that its financial reports are an accurate representation of MSU's financial position as of June 30, 2015.

No significant changes were made to Plante Moran's audit approach, which was reviewed by the Audit Committee prior to audit work commencing. No significant adjustments were proposed during the audit, and no material weaknesses in internal controls or accounting policies and procedures were noted.

Based upon this review and report, action was recommended to make official the June 30, 2015 financial statements of the University.

It was recommended that the Board of Trustees approve and make official the financial statements of the University.

RESOLVED, that the Board of Trustees of Michigan State University hereby accepts the audited financial statements for the fiscal year ended June 30, 2015.

Trustee Breslin **moved to approve** the resolution, with support from Trustee Lyons.

THE BOARD VOTED to approve the resolution.

Trustee Breslin also reported that the Audit Committee discussed the potential financial reporting impact of recent accounting rule changes issued by the Governmental Accounting Standards Board (GASB) related to reporting its Other Postemployment Benefits (OPEB) liability. Trustee Breslin stated that these new rules are required to be implemented by fiscal year 2017-18.

10. Trustee Comments

Trustee Ferguson thanked the Board for its work and stated that the best is yet to come for MSU.

Trustee Mosallam asked Student Liaison Dominique Clemons to discuss an item discussed at the liaison meeting.

Mr. Clemons announced ASMSU's involvement in the national It's On Us Week Campaign and the activities that will be taking place on campus this week as well as throughout the school year.

Trustee Foster noted MSU's global footprint and complimented Vice President Swain and the entire Communication and Brand Strategy team for its work in promoting MSU to the world.

Trustee Byrum wished Dean Heller the best in the next stage of his career.

Trustee Breslin noted the high quality of the Student Liaison meeting and also complimented President Simon and Vice President Maybank on the gathering of student leaders held earlier in the week.

Trustee Lyons thanked the Faculty Liaison Committee for its work and recognized Jalen Watts-Jackson for his game-winning touchdown at the end of the MSU vs. University of Michigan football game on October 17.

11. Request to Adjourn

On a motion by Trustee Ferguson, supported by Trustee Mosallam, **THE BOARD VOTED to adjourn** at 10:45 a.m.

Respectfully submitted,



William R. Beekman
Vice President and Secretary of the Board of Trustees

**RESEARCH
PRESENTATION
TO THE MSU BOARD OF TRUSTEES**

OCTOBER 30, 2015


APPENDIX A

**CHARLES W. (ANDY)
ANDERSON**

COLLEGE OF EDUCATION

Facilitated by the Office of the Vice President for
Research and Graduate Studies


Charles W. (Andy) Anderson has been a Professor in the Department of Teacher Education at Michigan State University since receiving his Ph.D. in science education from The University of Texas at Austin in 1979. He is past president of the National Association for Research in Science Teaching. He has been co-editor of the *Journal of Research in Science Teaching* and associate editor of *Cognition and Instruction*. He won the career award for Distinguished Contributions to Science Education through Research from the National Association for Research in Science Teaching. His current research focuses on the development of learning progressions leading to environmental science literacy for K-12 and college students and using this research as the basis for improving curriculum and instruction in schools.



Carbon TIME
Transformations In Matter and Energy

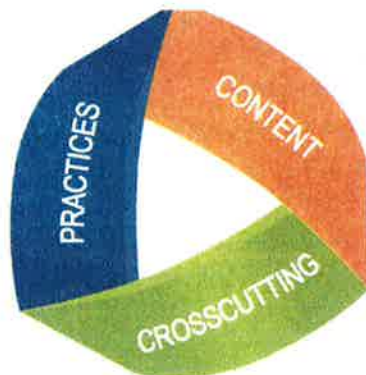
The *Carbon TIME* Project (*Carbon: Transformations in Matter and Energy*)

Charles W. (Andy) Anderson, Principal Investigator

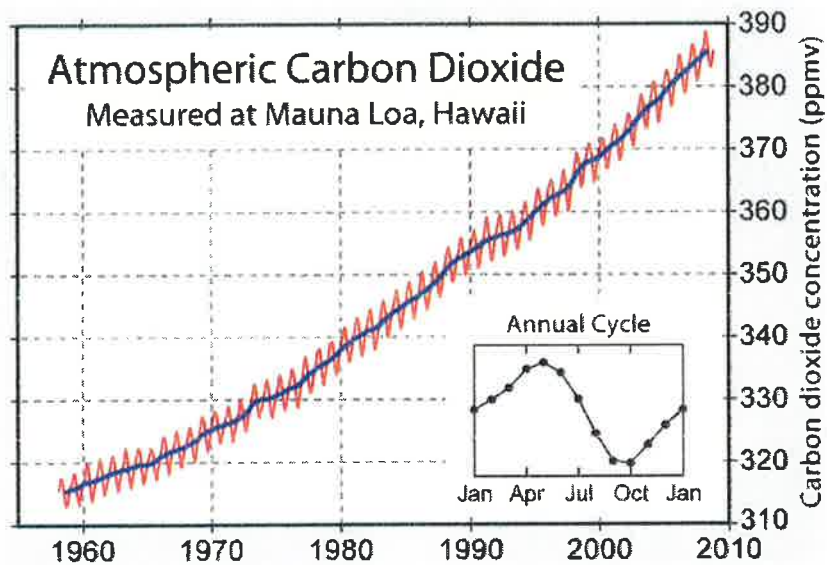


Natural Resource Ecology Laboratory | BSCS | SEATTLE PUBLIC SCHOOLS | COLORADO SCHOOL OF MINES
EARTH • ENERGY • ENVIRONMENT

Next Generation Science Standards:
Three-dimensional science learning

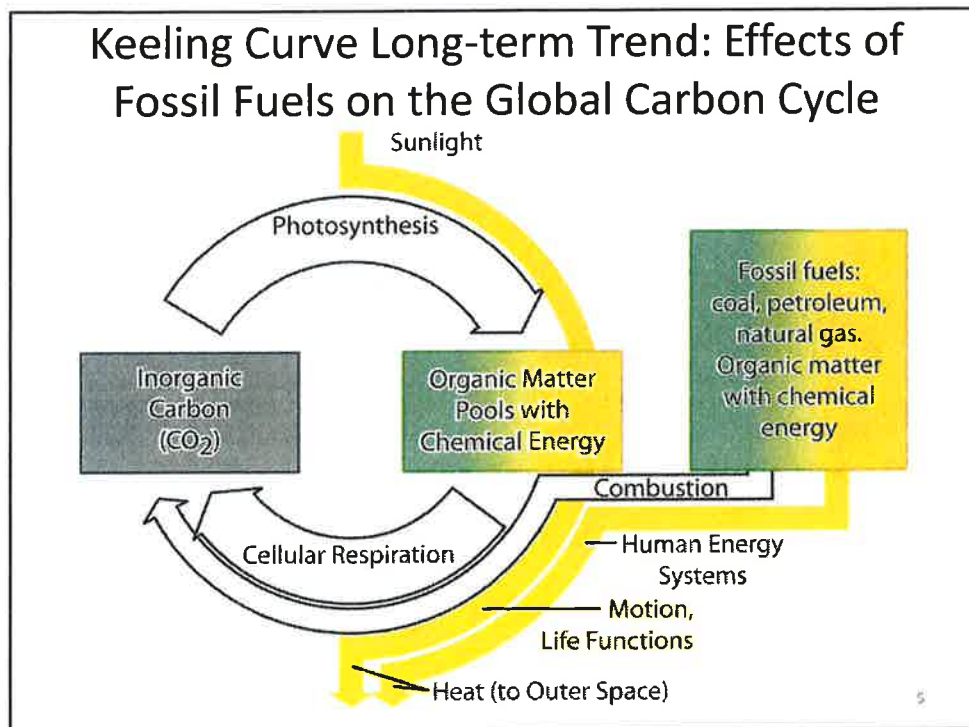


The Keeling Curve as an Example



Three-dimensional learning about the Keeling Curve

- Practices
 - Interpreting and analyzing data
 - Explaining (using models)
- Crosscutting concepts
 - Connecting system models at different scales
 - Energy and matter: conservation and tracing through systems and processes
- Disciplinary core ideas
 - Life sciences: Ecosystems: Interactions, energy, and dynamics
 - Earth sciences: Earth's systems; Earth and human activity)
 - Physical sciences: Matter and its interactions; Energy



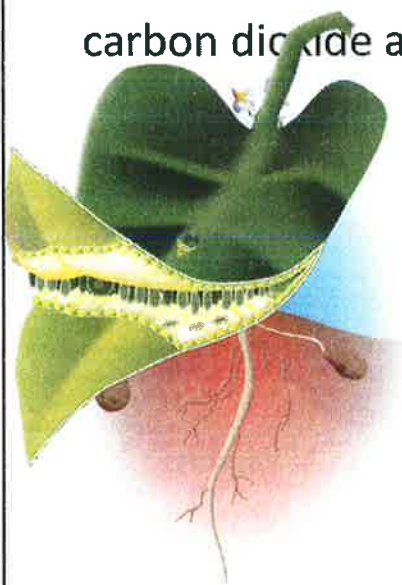
Building Student Understanding Based on Learning Progression Research

- *Carbon TIME* units and assessment system
 - *Systems and Scale*
 - *Animals*
 - *Plants*
 - *Decomposers*
 - *Ecosystems*
 - *Human Energy System*
- Online professional development
- Professional support networks in Michigan, Colorado, and Washington state

Investigations: Developing Arguments from Evidence



Plants make glucose from carbon dioxide and water in their leaves.



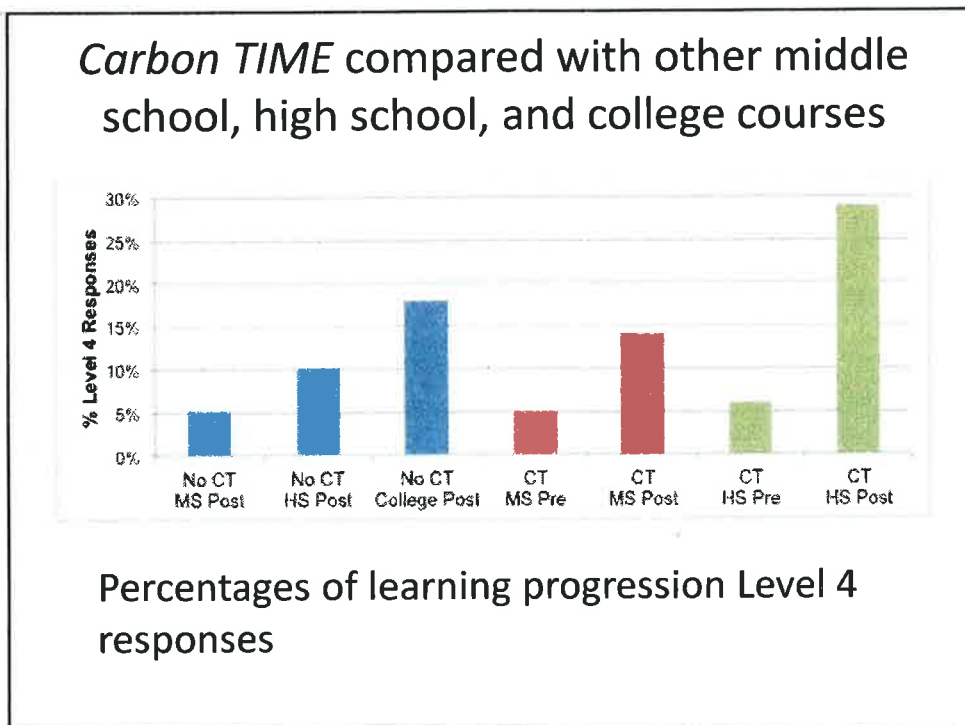
Comparing photos of reactant and product molecules
Compare the atoms and energy units on the reactant and products sides.

Reactants

→

Products

Remember: **Atoms last forever** (so you can rearrange atoms into new molecules, but can't add or subtract atoms). **Energy lasts forever** (so you can change forms of energy, but energy units can't appear or go away).



OPTION AGREEMENT EXTENSION TERM SHEET

Party: Black Pine Engineering, LLC

License: Option Extension on patent rights

Term: From the effective date of the agreement to April 27, 2016; extendable upon mutual agreement. Term on the initial one-year option expires October 26, 2015.

Technology: TEC2011-0071 "Rotor Apparatus" including U.S. Patent Application 14/001,820; and
 TEC2004-0084 "Woven Turbomachine Impeller" including U.S. Patents Nos. 7,938,627; 8,449,258; and 8,506,254

The parties may add or remove technologies under the agreement, including improvements generated under a separate sponsored research agreement, provided that the change does not affect the financial consideration of the parties or the nature or extent of any pecuniary interest of MSU personnel.

Technology's Potential Commercial Utilization: Gas removal compressors

Payment Terms: \$2,500 fee payable within 30 days of invoice. Initial one-year option fee was \$5,000.

Services Provided: By MSU to Black Pine Engineering, LLC: None contemplated under agreement
 By Black Pine Engineering, LLC to MSU: None contemplated under agreement

Organization Type: Michigan limited liability company

Personnel Interest: Dr. Norbert H. Mueller, an Associate Professor in the Department of Mechanical Engineering, and his family own or have options to buy an ownership interest in more than 1% of the company. Dr. Mueller is also an officer of Black Pine Engineering, LLC.