SENATE BILL No. 144

February 15, 2011, Introduced by Senator GREEN and referred to the Committee on Agriculture.

A bill to amend 1984 PA 270, entitled "Michigan strategic fund act,"

by amending section 88a (MCL 125.2088a), as amended by 2006 PA 639.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

- 1 Sec. 88a. As used in this chapter:
- 2 (a) "Advanced automotive, manufacturing, and materials,
- 3 INFORMATION, AND AGRICULTURAL PROCESSING technology" means any
 4 technology that involves 1 or more of the following:
 - (i) Materials with engineered properties created through the development of specialized process and synthesis technology.
 - (ii) Nanotechnology, including materials, devices, or systems at the atomic, molecular, or macromolecular level, with a scale measured in nanometers.

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- 1 (iii) Microelectromechanical systems, including devices or
- 2 systems integrating microelectronics with mechanical parts and a
- 3 scale measured in micrometers.
- 4 (iv) Improvements to vehicle safety, vehicle performance,
- 5 vehicle production, or environmental impact, including, but not
- 6 limited to, vehicle equipment and component parts.
- 7 (v) A new technology, device, or system that enhances or
- 8 improves the manufacturing process of wood, timber, or
- 9 agricultural-based products.
- 10 (vi) Any technology that involves an alternative energy vehicle
- 11 or its components, as alternative energy vehicle is defined under
- 12 section 2 of the Michigan next energy authority act, 2002 PA 593,
- **13** MCL 207.822.
- 14 (vii) Advanced computing or electronic device technology
- 15 related to technology described under this subdivision.
- 16 (viii) Design, engineering, testing, or diagnostics related to
- 17 technology described under this subdivision.
- 18 (ix) Product research and development related to technology
- 19 described under this subdivision.
- 20 (b) "Advanced computing" means any technology used in the
- 21 design and development of 1 or more of the following:
- (i) Computer hardware and software.
- 23 (ii) Data communications.
- 24 (iii) Information technologies.
- 25 (c) "Alternative energy technology" means applied research or
- 26 commercialization of new or next generation technology in 1 or more
- 27 of the following:

- 1 (i) Alternative energy technology as that term is defined in
- 2 section 2 of the Michigan next energy authority act, 2002 PA 593,
- 3 MCL 207.822.
- 4 (ii) Devices or systems designed and used solely for the
- 5 purpose of generating energy from agricultural crops, residue and
- 6 waste generated from the production and processing of agricultural
- 7 products, animal wastes, or food processing wastes, not including a
- 8 conventional gasoline or diesel fuel engine or retrofitted
- 9 conventional gasoline or diesel fuel engine.
- 10 (iii) A new technology, product, or system that permits the
- 11 utilization of biomass for the production of specialty, commodity,
- 12 or foundational chemicals or of novel or economical commodity
- 13 materials through the application of biotechnology that minimizes,
- 14 complements, or replaces reliance on petroleum for the production.
- 15 Alternative energy technology also includes a new technology,
- 16 product, or system that utilizes wind energy.
- 17 (iv) Advanced computing or electronic device technology related
- 18 to technology described under this subdivision.
- 19 (v) Design, engineering, testing, or diagnostics related to
- 20 technology described under this subdivision.
- 21 (vi) Product research and development related to a technology
- 22 described under this subdivision.
- (d) "Applied research" means translational research conducted
- 24 with the objective of attaining a specific benefit or to solve a
- 25 practical problem, or other research activity that seeks to
- 26 utilize, synthesize, or apply existing knowledge, information, or
- 27 resources to the resolution of a specified problem, question, or

- 1 issue, with high potential for commercial application to create
- 2 jobs in this state.
- 3 (e) "Basic research" means any original investigation for the
- 4 advancement of scientific or technological knowledge that will
- 5 enhance the research capacity of this state in a way that increases
- 6 the ability to attract to or develop companies, jobs, researchers,
- 7 or students in this state.
- 8 (f) "Commercialization" means the transition from research to
- 9 the actions necessary to achieve market entry and general market
- 10 competitiveness of new innovative technologies, processes, and
- 11 products and the services that support, assist, equip, finance, or
- 12 promote a person or an entity with that transition.
- 13 (g) "Competitive edge technology" means 1 or more of the
- 14 following:
- (i) Life sciences technology.
- 16 (ii) Advanced automotive, manufacturing, and materials,
- 17 INFORMATION, AND AGRICULTURAL PROCESSING technology.
- 18 (iii) Homeland security and defense technology.
- 19 (iv) Alternative energy technology.
- 20 (v) ANY OTHER INNOVATIVE TECHNOLOGY AS DETERMINED BY THE FUND
- 21 BOARD.
- (h) "Electronic device technology" means any technology that
- 23 involves microelectronics, semiconductors, electronic equipment,
- 24 and instrumentation, radio frequency, microwave, and millimeter
- 25 electronics; optical and optic-electrical devices; or data and
- 26 digital communications and imaging devices.
- (i) "Fund board" means the board of the Michigan strategic

- 1 fund described in section 5.
- 2 (j) "Homeland security and defense technology" means
- 3 technology that assists in the assessment of threats or damage to
- 4 the general population and critical infrastructure, protection of,
- 5 defense against, or mitigation of the effects of foreign or
- 6 domestic threats, disasters, or attacks, or support for crisis or
- 7 response management, including, but not limited to, 1 or more of
- 8 the following:
- 9 (i) Sensors, systems, processes, or equipment for
- 10 communications, identification and authentication, screening,
- 11 surveillance, tracking, and data analysis.
- 12 (ii) Advanced computing or electronic device technology related
- 13 to technology described under this subdivision.
- 14 (iii) Aviation technology, including, but not limited to,
- 15 avionics, airframe design, sensors, early warning systems, and
- 16 services related to technology described under this subdivision.
- 17 (iv) Design, engineering, testing, or diagnostics related to
- 18 technology described under this subdivision.
- 19 (v) Product research and development related to technology
- 20 described under this subdivision.
- (k) "Independent peer review expert" means a person or persons
- 22 selected by the commercialization board with appropriate expertise
- 23 to conduct an independent, unbiased, objective, and competitive
- 24 evaluation of activities funded under section 88k. The person or
- 25 persons shall demonstrate the capability and experience, as
- 26 appropriate or necessary for the particular activity funded, to do
- 27 all of the following:

- 1 (i) Conduct a highly competitive and intensive, independent,
- 2 multiphased, peer-review-based evaluation process.
- 3 (ii) Employ personnel with appropriate business, scientific,
- 4 technical, commercial, or other specialized expertise to carry out
- 5 each aspect of the evaluation process.
- 6 (iii) Provide recommendations to or assist the commercialization
- 7 board in identifying high-quality activities for funding that are
- 8 likely to result in the development and commercialization of
- 9 competitive edge technology and job creation in this state. The
- 10 recommendations shall include all materials used by the independent
- 11 peer review expert in making the recommendation.
- 12 (iv) Assure that any peer review process developed maintains a
- 13 high level of integrity.
- 14 (1) "Institution of higher education" means an institution of
- 15 higher education or a community or junior college described in
- 16 section 4, 5, 6, or 7 of article VIII of the state constitution of
- 17 1963 or an independent nonprofit degree-granting institution of
- 18 postsecondary education in this state that is approved by the state
- 19 board of education.
- 20 (m) "Jobs for Michigan investment fund" or "investment fund"
- 21 means the jobs for Michigan investment fund created in section 88h.
- 22 (n) "Life sciences" means science for the examination or
- 23 understanding of life or life processes, including, but not limited
- 24 to, all of the following:
- 25 (i) Bioengineering.
- 26 (ii) Biomedical engineering.
- 27 (iii) Genomics.

- 1 (iv) Proteomics.
- 2 (v) Molecular and chemical ecology.
- 3 (vi) Biotechnology, including any technology that uses living
- 4 organisms, cells, macromolecules, microorganisms, umbilical cord
- 5 blood, or substances from living organisms to make or modify a
- 6 product for useful purposes. Biotechnology or life sciences does
- 7 not include any of the following:
- 8 (A) Activities prohibited under section 2685 of the public
- 9 health code, 1978 PA 368, MCL 333.2685.
- 10 (B) Activities prohibited under section 2688 of the public
- 11 health code, 1978 PA 368, MCL 333.2688.
- 12 (C) Activities prohibited under section 2690 of the public
- 13 health code, 1978 PA 368, MCL 333.2690.
- 14 (D) Activities prohibited under section 16274 of the public
- 15 health code, 1978 PA 368, MCL 333.16274.
- 16 (E) Stem cell research with human embryonic tissue.
- 17 (o) "Life sciences technology" means any technology derived
- 18 from life sciences intended to improve human health or the overall
- 19 quality of human life, including, but not limited to, systems,
- 20 processes, or equipment for drug or gene therapies, biosensors,
- 21 testing, medical devices or instrumentation with a therapeutic or
- 22 diagnostic value, a pharmaceutical or other product that requires
- 23 United States food and drug administration approval or registration
- 24 prior to its introduction in the marketplace and is a drug or
- 25 medical device as defined by the federal food, drug, and cosmetic
- 26 act, 21 USC 301 to 399—399A, or 1 or more of the following:
- 27 (i) Advanced computing or electronic device technology related

- 1 to technology described under this subdivision.
- 2 (ii) Design, engineering, testing, or diagnostics related to
- 3 technology or the commercial manufacturing of technology described
- 4 under this subdivision.
- 5 (iii) Product research and development related to technology
- 6 described under this subdivision.
- 7 (p) "Qualified business" means a business entity located in
- 8 this state.
- 9 (q) "Qualified mezzanine fund" means a person or entity
- 10 primarily engaged in making loans or investments ranging in size
- 11 from \$250,000.00 to \$6,000,000.00 that is managed by 2 or more
- 12 individuals with no less than 5 years' direct experience in
- 13 mezzanine lending or capital investments and that holds investment
- 14 capital or has commitments from investors other than the fund and
- 15 at least 2 financial institutions.
- 16 (r) "Qualified private equity fund" means a firm principally
- 17 or primarily engaged in investing in or acquiring businesses that
- 18 is managed by 2 or more individuals with no less than 5 years of
- 19 direct experience in private equity investments, and that holds
- 20 investment capital from investors other than the fund.
- (s) "Qualified venture capital fund" means a firm principally
- 22 or primarily engaged in investing in or acquiring early stage
- 23 businesses with growth potential that have not yet demonstrated
- 24 consistent profitability or a proven business model, that is
- 25 managed by 2 or more individuals with not less than 5 years of
- 26 direct experience in venture capital, and that holds capital from
- 27 investors other than the fund.

- 1 (t) "Small business" means a business entity formed or doing
- 2 business in this state, including the affiliates of the business
- 3 concern, which business entity is independently owned and operated
- 4 and employs fewer than 250 full-time employees or has gross annual
- 5 sales of less than \$6,000,000.00.
- 6 (u) "21st century investments" means investments in 1 or more
- 7 of the following:
- 8 (i) Commercial loan guarantees under a loan enhancement program
- 9 operated by the fund.
- 10 (ii) Private equity investments under a private equity
- 11 investment program operated by the fund.
- 12 (iii) Venture capital investments under a venture capital
- investment program operated by the fund.
- 14 (iv) Mezzanine investments under a mezzanine investment program
- 15 operated by the fund.
- 16 (v) "Strategic economic investment and commercialization
- 17 board" or "commercialization board" means the strategic economic
- 18 investment and commercialization board created in section 88k.
- 19 (w) "University technology transfer" means innovative methods
- 20 to accelerate the creation of start-up companies affiliated with
- 21 institutions of higher education or the transfer of competitive
- 22 edge technology research from an institution of higher education to
- 23 a qualified business in Michigan.