

SENATE BILL No. 1320

May 9, 2002, Introduced by Senators STILLE, STEIL and HAMMERSTROM and referred to the Committee on Finance.

A bill to amend 1893 PA 206, entitled
"The general property tax act,"
(MCL 211.1 to 211.157) by adding section 9i.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

1 SEC. 9I. (1) SUBJECT TO SUBSECTION (3), THE FOLLOWING PER-
2 SONAL PROPERTY IS EXEMPT FROM THE COLLECTION OF TAXES UNDER THIS
3 ACT IF THAT PERSONAL PROPERTY WAS NOT SUBJECT TO OR EXEMPT FROM
4 THE COLLECTION OF TAXES UNDER THIS ACT BEFORE THE EFFECTIVE DATE
5 OF THE AMENDATORY ACT THAT ADDED THIS SECTION:

- 6 (A) AN ALTERNATIVE ENERGY SYSTEM.
- 7 (B) AN ALTERNATIVE ENERGY VEHICLE.
- 8 (C) ALL PERSONAL PROPERTY OF AN ALTERNATIVE ENERGY TECHNOL-
9 OGY BUSINESS.

10 (D) THE PERSONAL PROPERTY OF A BUSINESS THAT IS NOT AN
11 ALTERNATIVE ENERGY TECHNOLOGY BUSINESS THAT IS USED SOLELY FOR

1 THE PURPOSE OF RESEARCHING, DEVELOPING, OR MANUFACTURING AN
2 ALTERNATIVE ENERGY TECHNOLOGY.

3 (2) AS USED IN THIS SECTION:

4 (A) "ADVANCED BATTERY CELL" MEANS A RECHARGEABLE BATTERY
5 CELL WITH A SPECIFIC ENERGY OF NOT LESS THAN 80 WH/KG.

6 (B) "ALTERNATIVE ENERGY MARINE PROPULSION SYSTEM" MEANS AN
7 ONBOARD PROPULSION SYSTEM OR DETACHABLE OUTBOARD PROPULSION
8 SYSTEM FOR A WATERCRAFT THAT IS POWERED BY A FUEL CELL ENERGY
9 SYSTEM, PHOTOVOLTAIC ENERGY SYSTEM, OR BATTERY CELL ENERGY SYSTEM
10 AND THAT IS THE SINGULAR PROPULSION SYSTEM FOR THE WATERCRAFT.
11 ALTERNATIVE ENERGY MARINE PROPULSION SYSTEM DOES NOT INCLUDE BAT-
12 TERY POWERED MOTORS DESIGNED TO ASSIST IN THE PROPULSION OF THE
13 WATERCRAFT DURING FISHING OR OTHER RECREATIONAL USE.

14 (C) "ALTERNATIVE ENERGY SYSTEM" MEANS THE SMALL-SCALE GENER-
15 ATION OF POWER OR HEAT FROM 1 OR ANY COMBINATION OF THE FOLLOWING
16 TYPES OF ENERGY SYSTEMS:

17 (i) A FUEL CELL ENERGY SYSTEM.

18 (ii) A PHOTOVOLTAIC ENERGY SYSTEM.

19 (iii) A SOLAR-THERMAL ENERGY SYSTEM.

20 (iv) A WIND ENERGY SYSTEM.

21 (v) A CHP ENERGY SYSTEM.

22 (vi) A MICROTURBINE ENERGY SYSTEM.

23 (vii) A MINITURBINE ENERGY SYSTEM.

24 (viii) A STIRLING CYCLE ENERGY SYSTEM.

25 (ix) A BATTERY CELL ENERGY SYSTEM.

26 (x) A CLEAN OR RENEWABLE FUEL ENERGY SYSTEM.

1 (D) "ALTERNATIVE ENERGY TECHNOLOGY" MEANS EQUIPMENT,
2 COMPONENT PARTS, MATERIALS, ELECTRONIC DEVICES, TESTING
3 EQUIPMENT, AND RELATED SYSTEMS THAT ARE SOLELY RELATED TO THE
4 FOLLOWING:

5 (i) THE STORAGE OF HYDROGEN FOR USE IN AN ALTERNATIVE ENERGY
6 SYSTEM.

7 (ii) THE PROCESS OF GENERATING AND PUTTING INTO A USABLE
8 FORM THE POWER OR HEAT GENERATED BY AN ALTERNATIVE ENERGY
9 SYSTEM. ALTERNATIVE ENERGY TECHNOLOGY DOES NOT INCLUDE THOSE
10 COMPONENT PARTS OF AN ALTERNATIVE ENERGY SYSTEM THAT ARE REQUIRED
11 REGARDLESS OF THE ENERGY SOURCE.

12 (iii) A MICROGRID. AS USED IN THIS SUBPARAGRAPH,
13 "MICROGRID" MEANS THE LINES, WIRES, AND CONTROLS TO CONNECT 2 OR
14 MORE ALTERNATIVE ENERGY SYSTEMS.

15 (E) "ALTERNATIVE ENERGY TECHNOLOGY BUSINESS" MEANS A BUSI-
16 NESS ENGAGED SOLELY IN THE RESEARCH, DEVELOPMENT, OR MANUFACTUR-
17 ING OF ALTERNATIVE ENERGY TECHNOLOGY.

18 (F) "ALTERNATIVE ENERGY VEHICLE" MEANS A MOTOR VEHICLE MANU-
19 FACTURED BY AN ORIGINAL EQUIPMENT MANUFACTURER THAT MEETS FEDERAL
20 MOTOR VEHICLE SAFETY STANDARDS FOR ITS CLASS OF VEHICLES AS
21 DEFINED BY THE MICHIGAN VEHICLE CODE, 1949 PA 300, MCL 257.1 TO
22 257.923, PROPELLED BY AN ALTERNATIVE ENERGY SYSTEM. ALTERNATIVE
23 ENERGY VEHICLE DOES NOT INCLUDE A VEHICLE DESIGNED TO OPERATE
24 SOLELY ON GASOLINE OR DIESEL FUEL, REGARDLESS OF WHETHER IT CAN
25 ALSO BE OPERATED ON AN ALTERNATIVE FUEL. ALTERNATIVE ENERGY
26 VEHICLE INCLUDES THE FOLLOWING:

1 (i) AN ALTERNATIVE FUELED VEHICLE. AS USED IN THIS
2 SUBPARAGRAPH, "ALTERNATIVE FUELED VEHICLE" MEANS A VEHICLE
3 POWERED SOLELY BY A CLEAN OR RENEWABLE FUEL ENERGY SYSTEM AND
4 FUELED SOLELY BY A CLEAN OR RENEWABLE FUEL.

5 (ii) A FUEL CELL VEHICLE. AS USED IN THIS SUBPARAGRAPH,
6 "FUEL CELL VEHICLE" MEANS A MOTOR VEHICLE POWERED SOLELY BY A
7 FUEL CELL ENERGY SYSTEM.

8 (iii) AN ELECTRIC VEHICLE. AS USED IN THIS SUBPARAGRAPH,
9 "ELECTRIC VEHICLE" MEANS A MOTOR VEHICLE POWERED SOLELY BY A BAT-
10 TERY CELL ENERGY SYSTEM.

11 (iv) A HYBRID VEHICLE. AS USED IN THIS SUBPARAGRAPH,
12 "HYBRID VEHICLE" MEANS A MOTOR VEHICLE THAT OBTAINS POWER SOLELY
13 FROM 2 DIFFERENT ALTERNATIVE ENERGY SYSTEMS.

14 (v) A SOLAR VEHICLE. AS USED IN THIS SUBPARAGRAPH, "SOLAR
15 VEHICLE" MEANS A MOTOR VEHICLE POWERED SOLELY BY A PHOTOVOLTAIC
16 ENERGY SYSTEM.

17 (vi) A HYBRID ELECTRIC VEHICLE. AS USED IN THIS SUBPARA-
18 GRAPH, "HYBRID ELECTRIC VEHICLE" MEANS A VEHICLE POWERED BY AN
19 INTEGRATED PROPULSION SYSTEM CONSISTING OF AN ELECTRIC MOTOR AND
20 COMBUSTION ENGINE. HYBRID ELECTRIC VEHICLE DOES NOT INCLUDE A
21 RETROFITTED CONVENTIONAL DIESEL OR GASOLINE ENGINE. A HYBRID
22 ELECTRIC VEHICLE OBTAINS THE POWER NECESSARY TO PROPEL THE VEHI-
23 CLE FROM A COMBUSTION ENGINE AND 1 OF THE FOLLOWING:

24 (A) A BATTERY CELL ENERGY SYSTEM.

25 (B) A FUEL CELL ENERGY SYSTEM.

26 (C) A PHOTOVOLTAIC ENERGY SYSTEM.

1 (G) "BATTERY CELL" MEANS A CLOSED ELECTROCHEMICAL SYSTEM
2 THAT CONVERTS CHEMICAL ENERGY FROM OXIDATION AND REDUCTION
3 REACTIONS DIRECTLY INTO ELECTRIC ENERGY WITHOUT COMBUSTION AND
4 WITHOUT EXTERNAL FUEL AND CONSISTS OF AN ANODE, A CATHODE, AND AN
5 ELECTROLYTE.

6 (H) "BATTERY CELL ENERGY SYSTEM" MEANS 1 OR MORE BATTERY
7 CELLS AND AN INVERTER OR OTHER POWER CONDITIONING UNIT USED TO
8 PERFORM 1 OR MORE OF THE FOLLOWING FUNCTIONS:

9 (i) PROPEL A MOTOR VEHICLE OR AN ALTERNATIVE ENERGY MARINE
10 PROPULSION SYSTEM.

11 (ii) PROVIDE ELECTRIC POWER THAT IS DISTRIBUTED WITHIN A
12 DWELLING OR OTHER STRUCTURE.

13 (iii) PROVIDE ELECTRIC POWER TO OPERATE A PORTABLE ELEC-
14 TRONIC DEVICE INCLUDING, BUT NOT LIMITED TO, A LAPTOP COMPUTER, A
15 PERSONAL DIGITAL ASSISTANT, OR A CELL PHONE. FOR PURPOSES OF
16 THIS SUBPARAGRAPH ONLY, A BATTERY CELL ENERGY SYSTEM SHALL ONLY
17 USE ADVANCED BATTERY CELLS.

18 (I) "CHP ENERGY SYSTEM" MEANS AN INTEGRATED UNIT THAT GENER-
19 ATES POWER AND EITHER COOLS, HEATS, OR CONTROLS HUMIDITY IN
20 BUILDINGS OR PROVIDES HEATING, DRYING, OR CHILLING FOR AN INDUS-
21 TRIAL PROCESS THAT INCLUDES AND IS LIMITED TO BOTH OF THE
22 FOLLOWING:

23 (i) AN ABSORPTION CHILLER, A DESICCANT DEHUMIDIFIER, OR HEAT
24 RECOVERY EQUIPMENT.

25 (ii) ONE OF THE FOLLOWING:

1 (A) AN INTERNAL COMBUSTION ENGINE, AN EXTERNAL COMBUSTION
2 ENGINE, A MICROTURBINE, OR A MINITURBINE, FUELED SOLELY BY A
3 CLEAN OR RENEWABLE FUEL.

4 (B) A FUEL CELL ENERGY SYSTEM.

5 (J) "CLEAN FUEL" MEANS 1 OR MORE OF THE FOLLOWING:

6 (i) METHANE.

7 (ii) NATURAL GAS.

8 (iii) METHANOL NEAT OR METHANOL BLENDS CONTAINING AT LEAST
9 85% METHANOL.

10 (iv) DENATURED ETHANOL NEAT OR ETHANOL BLENDS CONTAINING AT
11 LEAST 85% ETHANOL.

12 (v) COMPRESSED NATURAL GAS.

13 (vi) LIQUEFIED NATURAL GAS.

14 (vii) LIQUEFIED PETROLEUM GAS.

15 (viii) HYDROGEN.

16 (K) "CLEAN OR RENEWABLE FUEL ENERGY SYSTEM" MEANS A DEVICE
17 THAT IS DESIGNED AND USED SOLELY FOR THE PURPOSE OF GENERATING
18 POWER FROM A CLEAN FUEL OR RENEWABLE FUEL. CLEAN OR RENEWABLE
19 FUEL ENERGY SYSTEM DOES NOT INCLUDE A CONVENTIONAL GASOLINE OR
20 DIESEL FUEL ENGINE OR A RETROFITTED CONVENTIONAL DIESEL OR GASO-
21 LINE ENGINE.

22 (l) "FUEL CELL ENERGY SYSTEM" MEANS 1 OR MORE FUEL CELLS OR
23 FUEL CELL STACKS AND AN INVERTER OR OTHER POWER CONDITIONING
24 UNIT. A FUEL CELL ENERGY SYSTEM MAY ALSO INCLUDE A FUEL
25 PROCESSOR. AS USED IN THIS SUBDIVISION:

26 (i) "FUEL CELL" MEANS AN ELECTROCHEMICAL DEVICE THAT USES AN
27 EXTERNAL FUEL AND CONTINUOUSLY CONVERTS THE CHEMICAL ENERGY

1 RELEASED FROM THE OXIDATION OF HYDROGEN OR METHANOL BY OXYGEN
2 DIRECTLY INTO ELECTRIC ENERGY WITHOUT COMBUSTION AND CONSISTS OF
3 AN ANODE, A CATHODE, AND AN ELECTROLYTE.

4 (ii) "FUEL CELL STACK" MEANS AN ASSEMBLY OF FUEL CELLS.

5 (iii) "FUEL PROCESSOR" MEANS A DEVICE THAT CONVERTS A FUEL,
6 INCLUDING, BUT NOT LIMITED TO, METHANOL, NATURAL GAS, OR GASO-
7 LINE, INTO A HYDROGEN RICH GAS, WITHOUT COMBUSTION FOR USE IN A
8 FUEL CELL.

9 (M) "MICROTURBINE ENERGY SYSTEM" MEANS AN ELECTRIC POWER
10 GENERATING SYSTEM COMPOSED OF A COMPRESSOR, COMBUSTOR, TURBINE,
11 AND GENERATOR, FUELED SOLELY BY A CLEAN FUEL OR A RENEWABLE FUEL
12 WITH A CAPACITY OF NOT MORE THAN 250 KILOWATTS. A MICROTURBINE
13 ENERGY SYSTEM MAY ALSO INCLUDE A RECUPERATOR AND AN ALTERNATOR.

14 (N) "MINITURBINE ENERGY SYSTEM" MEANS AN ELECTRIC POWER GEN-
15 ERATING SYSTEM COMPOSED OF A COMPRESSOR, COMBUSTOR, TURBINE, AND
16 GENERATOR, FUELED SOLELY BY A CLEAN FUEL OR A RENEWABLE FUEL WITH
17 A CAPACITY OF NOT MORE THAN 2 MEGAWATTS. A MINITURBINE ENERGY
18 SYSTEM MAY ALSO INCLUDE A RECUPERATOR AND AN ALTERNATOR.

19 (O) "PHOTOVOLTAIC ENERGY SYSTEM" MEANS A SOLAR ENERGY DEVICE
20 COMPOSED OF 1 OR MORE PHOTOVOLTAIC CELLS OR PHOTOVOLTAIC MODULES
21 AND AN INVERTER OR OTHER POWER CONDITIONING UNIT. A PHOTOVOLTAIC
22 SYSTEM MAY ALSO INCLUDE BATTERIES FOR POWER STORAGE. AS USED IN
23 THIS SUBDIVISION:

24 (i) "PHOTOVOLTAIC CELL" MEANS AN INTEGRATED DEVICE CONSIST-
25 ING OF LAYERS OF SEMICONDUCTOR MATERIALS AND ELECTRICAL CONTACTS
26 CAPABLE OF CONVERTING INCIDENT LIGHT DIRECTLY INTO ELECTRICITY.

1 (ii) "PHOTOVOLTAIC MODULE" MEANS AN ASSEMBLY OF PHOTOVOLTAIC
2 CELLS.

3 (P) "RENEWABLE FUEL" MEANS 1 OR MORE OF THE FOLLOWING:

4 (i) BIODIESEL OR BIODIESEL BLENDS CONTAINING AT LEAST
5 20% BIODIESEL. AS USED IN THIS SUBPARAGRAPH, "BIODIESEL" MEANS A
6 DIESEL FUEL SUBSTITUTE CONSISTING OF METHYL OR ETHYL ESTERS
7 PRODUCED FROM THE TRANSESTERIFICATION OF ANIMAL OR VEGETABLE FATS
8 WITH METHANOL OR ETHANOL.

9 (ii) BIOMASS. AS USED IN THIS SUBPARAGRAPH, "BIOMASS" MEANS
10 RESIDUES FROM THE WOOD AND PAPER PRODUCTS INDUSTRIES, RESIDUES
11 FROM FOOD PRODUCTION AND PROCESSING, TREES AND GRASSES GROWN SPE-
12 CIFICALLY TO BE USED AS ENERGY CROPS, AND GASEOUS FUELS PRODUCED
13 FROM SOLID BIOMASS, ANIMAL WASTES, MUNICIPAL WASTE, OR
14 LANDFILLS.

15 (Q) "SMALL-SCALE" MEANS A SINGLE ENERGY SYSTEM WITH A GENER-
16 ATING CAPACITY OF NOT MORE THAN 2 MEGAWATTS OR AN INTEGRATED
17 ENERGY SYSTEM WITH A GENERATING CAPACITY OF NOT MORE THAN
18 10 MEGAWATTS.

19 (R) "SOLAR THERMAL ENERGY SYSTEM" MEANS AN INTEGRATED UNIT
20 CONSISTING OF A SUNLIGHT COLLECTION DEVICE, A SYSTEM CONTAINING A
21 HEAT TRANSFER FLUID TO RECEIVE THE COLLECTED SUNLIGHT, AND HEAT
22 EXCHANGERS TO TRANSFER THE SOLAR HEAT ENERGY TO A THERMAL STORAGE
23 TANK TO HEAT OR COOL SPACES OR WATER OR TO GENERATE ELECTRICITY.

24 (S) "STIRLING CYCLE ENERGY SYSTEM" MEANS A CLOSED-CYCLE,
25 REGENERATIVE HEAT ENGINE THAT IS FUELED SOLELY BY A CLEAN FUEL OR
26 RENEWABLE FUEL AND USES AN EXTERNAL COMBUSTION PROCESS, HEAT
27 EXCHANGERS, PISTONS, A REGENERATOR, AND A CONFINED WORKING GAS,

1 SUCH AS HYDROGEN OR HELIUM, TO CONVERT HEAT INTO MECHANICAL
2 WORK. A STIRLING CYCLE ENERGY SYSTEM MAY ALSO INCLUDE A GENERA-
3 TOR TO GENERATE ELECTRICITY.

4 (T) "WIND ENERGY SYSTEM" MEANS AN INTEGRATED UNIT CONSISTING
5 OF A WIND TURBINE COMPOSED OF A ROTOR, AN ELECTRICAL GENERATOR, A
6 CONTROL SYSTEM, AND A TOWER, WHICH EXTRACTS ENERGY FROM MOVING
7 AIR TO PRODUCE ELECTRICITY.

8 (3) THE EXEMPTION UNDER SUBSECTION (1) APPLIES TO TAXES
9 LEVIED AFTER DECEMBER 31, 2002 AND BEFORE JANUARY 1, 2013.