

**The Economic Effects on Michigan of the
United Solar Ovonix, LLC Facility**

Prepared by the Michigan Economic Development Corporation utilizing Regional
Economic Models, Incorporated (REMI) software.

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Abstract

United Solar Ovonix, LLC is considering locating a production facility in Auburn Hills, Michigan. This facility would be a production facility for photovoltaic cells. The new facility would employ up to 230 people by the end of 2007. We estimate that by 2026, this location will have generated a total of 625 jobs in the state. Total state government revenues through 2026, net of MEGA costs and adjusted for inflation, would increase by \$41.8 million (2005 dollars) due to the location of the United Solar Ovonix, LLC project.

The purpose of this study is to estimate the potential economic and fiscal benefits to Michigan of United Solar Ovonix, LLC locating a production facility in Auburn Hills. Investment activity would take place between 2005 and 2006 with an investment of \$80.2 million. The facility would employ an additional 230 people and would be at full production by 2007.

The estimates of the benefits attributable to the project include the total number of jobs created in Michigan (by major industry, including spin-off jobs), and the associated personal income and state government revenue. Benefits net of the MEGA incentive package, from 2005 to 2026, are shown in the attached table. The MEGA incentive package includes relief from 100 percent of the single business tax for the period 2007 to 2015, and a tax credit to the company equal to 100 percent of the state income tax rate on the payroll (gross wages) of employees hired at the facility for the period 2007 to 2026.

The total employment effects, reported in the first line of the table, include the direct jobs created at the facility itself plus spin-off jobs. The spin-off jobs are created from two sources, increased purchases from Michigan suppliers and spending by people who receive income due to the increased economic activity. In 2007, the first year of full operations, an additional 498 jobs are generated in the state. The total number of jobs (direct plus spin-off) for every direct job introduced constitutes the "employment multiplier." The employment multiplier for the expansion averages 2.29 over the period 2005 to 2026. Sectoral detail on the employment is also shown in the table.

Personal income is shown in the next section of the table. Personal income is defined as the income of Michigan residents from all sources, after deduction of contributions to social insurance programs but before deduction of income tax and other personal taxes. As shown in the table, if United Solar Ovonix, LLC were to locate in Michigan under the incentive program, state personal income in 2007 would be higher by \$20.5 million (in current dollars) than it would be without the facility, and in 2026, it would be \$61.3 million higher. Adjusted for inflation, these numbers in 2005 dollars would be \$19.6 million in 2007 and \$40.0 million in 2026.

The gain in economic activity results in higher government revenues. We estimate that in 2007, the first year of full operations without investment activity, the facility would generate \$1.58 in additional gross state revenue, and that the MEGA package would provide a \$261,000 incentive to United Solar Ovonix, LLC. Thus, the new United Solar Ovonix, LLC facility would increase state revenues in 2007 by \$1.31 million, net of MEGA costs.

Over the period 2005 to 2026 state government revenue is projected to increase by \$61.9 million (in current dollars) due to the new United Solar Ovonix, LLC facility. The MEGA incentive package for United Solar Ovonix, LLC is forecast to cost \$7.8 million over the period, resulting in a net increase in state government revenue of \$54.1 million. Adjusted for inflation, the total net increase in state government revenue from 2005 to 2026 would be \$41.8 million in 2005 dollars. These calculations do not include any revenue losses due to the property tax abatement or the investment tax credit. If the costs of the abatement and the tax credit were included, the net revenue gain to state government would be slightly less.

None of the estimates include the nonmeasurable effects that would produce additional economic and fiscal benefits for Michigan, such as the intangible advantages of influencing other location and expansion decisions.

United Solar Ovonic, LLC
Economic and Fiscal Effects on Michigan - Net Benefits with the Incentive Package

Economic/Fiscal Indicator	2005	2006	2007	2008	2009	2010	2015	2020	2026	Total
Total Employment										
Manufacturing	326	129	498	506	514	517	543	578	625	
Non-Manufacturing	31	19	251	250	249	248	248	252	256	
Retail Trade	295	110	247	256	265	269	295	326	369	
Services	47	23	37	38	38	38	38	39	41	
Other	100	51	127	128	130	131	142	162	192	
	148	36	83	90	97	100	115	125	136	
In Current Dollars (Thousands):										
Personal Income	\$13,150	\$6,561	\$20,510	\$23,040	\$25,020	\$26,730	\$35,130	\$45,350	\$61,280	\$804,431
Gross State Revenue	1,013	505	1,579	1,774	1,927	2,058	2,705	3,492	4,719	61,941
Mega Cost	0	0	261	278	287	295	435	415	510	7,837
State Revenue Net of MEGA Cost*	\$1,013	\$505	\$1,318	\$1,496	\$1,640	\$1,763	\$2,270	\$3,077	\$4,209	\$54,104
Adjusted for Inflation (Thousands of 2005 Dollars):										
Personal Income	\$13,150	\$6,407	\$19,613	\$21,582	\$22,960	\$24,036	\$28,595	\$33,427	\$40,031	\$622,173
Gross State Revenue	1,013	493	1,510	1,662	1,768	1,851	2,202	2,574	3,083	47,907
Mega Cost	0	0	250	261	263	266	354	306	333	6,114
State Revenue Net of MEGA Cost*	\$1,013	\$493	\$1,260	\$1,401	\$1,505	\$1,585	\$1,848	\$2,268	\$2,750	\$41,793

* These estimates do not include any state government revenue losses due to the Investment Tax Credit, the Renaissance Zone Credit or the property tax abatement.