

# MEMORANDUM

Date:

February 15, 2011

To:

Michigan Economic Growth Authority

From:

Joe Quick, Project Specialist

Packaging Team

**Subject:** Briefing Memo – XG Sciences, Inc.

High Technology MEGA Credit

#### **COMPANY NAME**

XG Sciences, Inc. 5020 Northwind Drive, Suite 212 East Lansing, Michigan 48823

### **HISTORY OF COMPANY**

XG Sciences, Inc. ("XG") was organized in Michigan in May of 2006. Headquartered in East Lansing, Michigan, XG manufactures and sells xGnP® brand granphene nanoplatelets, and develops advanced multifunctional materials based on these nanoplatelets. Nanoplatelets are small stacks of graphene sheets about 6 nanometers in thickness, made through a proprietary manufacturing process. The company's technologies were developed largely at the Composite Materials and Structures Center at the Michigan State University College of Engineering.

The company works with end users, compounders, universities and research groups to tailor materials for specific applications. These materials make for a low-cost nano-additive in composite applications to improve electrical, thermal, barrier or mechanical properties. Applications for this product include nanocomposites, energy storage, electronics and lubricants. XG sells to over 300 customers worldwide.

XG currently has two locations in Michigan with a total of 7 employees.

## PROJECT DESCRIPTION

XG will expand the manufacture of graphene nanoplatelets in commercial quantities and produce highvalue products with this material. The company will consolidate their Lansing and East Lansing locations into one facility in Delhi Township that will facilitate an expansion to accommodate volume manufacturing and continued research and development for new applications. XG will make significant investment in leasing costs and machinery and equipment.

The company plans to invest approximately \$6.64 million, including lease costs of \$1.64 million, and create 50 jobs over the next five years, with 7 jobs projected in year 1, as a result of this project. The average weekly wage for the newly created jobs is anticipated to be \$1,162. The company also offers healthcare benefits, and plans to pay a portion of the benefit cost.

There are not any other Michigan businesses known in the same industry.

#### BENEFIT TO STATE

According to the economic analysis done by the Michigan Economic Development Corporation utilizing Regional Economic Models, Inc. software, it is estimated that this facility will generate a total of 126 jobs in the state by the year 2015. Total state government revenues through the year 2015, net of MEGA costs, would be increased by \$1,153,249 (current dollars) due to the presence of this facility.

#### **BUSINESS CASE**

XG is also considering Ohio for this expansion. In addition to gaps in leasing costs, XG sites grants for the purchase of manufacturing machinery and equipment, preferential loan terms for machinery and equipment and research and development, and tax credits for job creation as being desirable in Ohio.

#### OTHER STATE AND LOCAL ASSISTANCE

Delhi Charter Township has proposed a five-year PA 328 personal property tax abatement with an estimated value of \$390,577. In addition, Delhi Charter Township is considering a twelve-year PA 198 abatement for real property with an estimated value of \$291,469.

### **QUALIFYING HIGH-TECHNOLOGY ACTIVITY**

The company is a qualified high-technology business, whose primary business activity is Advanced Automotive, Manufacturing, and Materials Technology, as defined in the Act.

The company has certified that at least 10 percent of its total operating expenses are related to research and development.

#### RECOMMENDATION

Based on the factors described above, the Michigan Economic Development Corporation recommends a 100 percent high-technology employment tax credit for five years for up to 50 net new employees in excess of the company's established base of 7.