

## APPENDIX C

### EMERGE BOARD MEMO – APPENDIX “TARGETED INDUSTRIES” DEFINITIONS

The proposed definition of “Targeted industry” is the following:

“Targeted industry” means any industry identified from time to time by the Authority which shall initially include advanced transportation and logistics, advanced manufacturing, aviation, autonomous vehicle and zero-emission vehicle research or development, clean energy, life sciences, hemp processing, information and high technology, finance and insurance, professional services, film and digital media, non-retail food and beverage businesses including food innovation, and other innovative industries that disrupt current technologies or business models. A project shall be considered to be in a targeted industry if the activity undertaken by the full-time employees will be in a targeted industry, or if the business is in a targeted industry. An eligible business shall be considered to be in a targeted industry, if the project is for full-time employees of a division or subsidiary that falls within the definition of a targeted industry. A division or affiliate of an eligible business that is in a targeted industry shall be considered to be in a targeted industry, even if the project is for full-time employees that do not work directly in the targeted industry. The Authority may consider whether a business fits into another innovative industry that disrupts current technologies or business models, by assessing factors such as, whether businesses in the industry are offering products or services that significantly improve current market offerings on the basis of price or other performance levels, whether the new industry creates opportunities for new firms to enter and redefine the supply chain or value chain of an industry, or whether the industry utilizes new technology or business processes that allow New Jersey-based firms to collect a share of revenues that were traditionally only available to companies in other geographies.

The Authority developed definitions and policy interpretations for each of the listed industries within the definition of “Targeted industry” as included in the Emerge program regulations and statute. The following industry definitions will not be included in the Emerge Program rules, but instead would be incorporated in NJEDA’s program policies and posted on the Authority’s webpages for the applicable Programs.

**Advanced transportation and logistics industry** includes, but is not limited to, the research, development, commercialization, and implementation of technology and innovative methodologies to move goods, services, and people, including by rail, road, air, sea, cable, space and the processing, storage, supply chain management, handling and packaging of goods and services.

**Advanced transportation** includes, but is not limited to, the areas of infrastructure, vehicles, and operations. Examples of advanced transportation technologies may include advanced transportation, **sensor development**, electrification of vehicles and infrastructure, new transport vehicle development, smart infrastructure and smart cities technologies.

**Advanced logistics** includes, but is not limited to, the research, development, commercialization, and implementation of innovative planning, storage, supply chain management, handling, and packaging of goods and services.

Examples of advanced logistics technologies may include real-time dynamic tracking or pricing, automated processing and handling, the use of blockchain and artificial intelligence, and the use of advanced telecommunication technologies in logistics.

Excluded from this industry are conventional warehousing and distribution facilities, operations and conventional transportation businesses, such as trucking.

**Advanced manufacturing industry** includes, but is not limited to, activities that integrate advanced or innovative technologies, processes and materials to improve the manufacturing of products. Such activities include research, development, commercialization, and implementation of new manufacturing methods and processes that utilize technology or other innovative methodologies including both physical equipment and software supporting advanced production.

Examples of advanced manufacturing technologies include additive manufacturing technologies, computer-aided manufacturing, utilization of advanced sensors and robotics to improve production, development of advanced materials to support production, and digital twin development and utilization. **This industry also includes firms that manufacture either finished or interim advanced technologies or components.**

Excluded from this industry are conventional manufacturing firms that do not sufficiently develop or utilize technologies such as those listed above.

**Aviation industry** includes, but is not limited to, commercial businesses that are directly involved with air transportation, which utilizes an aircraft, such as airplanes, helicopters and drones.

The aviation industry also includes **aircraft manufacturing, aviation component manufacturing,** aviation research, air safety, involvement with military aviation and the design, production or use of drones. The aviation industry also includes research, development, and commercialization of aviation-specific software, processes, guidance systems, technologies, and other industry-specific innovative methodologies. This industry also includes firms that manufacture either finished or interim advanced technologies or components.

Excluded from this industry are the operations of regularly scheduled commercial or private flights.

**Autonomous vehicle research or development industry** includes, but is not limited to, the research, development and **implementation of technologies** that support the advancement of

vehicles that operate independently, increasingly without human involvement, and the related infrastructure for such vehicles.

Examples of autonomous vehicle and infrastructure technologies include sensors, radars, cameras, actuators, complex algorithms, machine learning systems, and software processors that support autonomous vehicle operations and maintenance. Excluded from this industry are research, development, and implementation of technologies that do not advance towards fully automated vehicular operations or the related infrastructure.

This industry also includes firms that manufacture either finished or interim advanced technologies or components.

**Zero-emission vehicle research or development industry** includes, but is not limited to, the research, development and implementation of technologies that advance the production of electric and other zero emission vehicles that reduce greenhouse gas emissions or improve air quality and the related infrastructure. This industry also includes firms that are undertaking specific projects to implement these technologies.

Examples of zero-emission vehicle technologies include plug-in-hybrid electric vehicles, battery-powered electric vehicles, hydrogen fuel cell-powered vehicles, vehicle charging infrastructure, electricity grid infrastructure improvements, and software to support these technologies.

Excluded from this industry are research, development, and implementation of technologies that do not reduce greenhouse gas emissions or improve air quality.

This industry also includes firms that manufacture either finished or interim advanced technologies or components.

**Clean energy industry** includes, but is not limited to, the research, development, commercialization, manufacturing of products and services, and implementation of technologies that support renewable energy generation and distributed energy resources, grid modernization, energy efficiency and zero-carbon building development, and transport system electrification.

Examples of clean energy technologies include solar power, onshore and offshore wind, electric battery storage, fuel-cell-based storage, carbon capture technologies, non-combustion waste-to-energy technologies, wave energy, water use minimization technologies, carbon-reducing materials, nuclear energy, heat pumps and geothermal, run of river hydroelectric, and other innovative recycling technologies and processes. This industry also includes firms that manufacture either finished or interim advanced technologies or components.

Excluded from this industry are distribution or transmission utilities, conventional landfill operations, combustion-based waste-to-energy projects, and natural gas projects.

**Life sciences industry** includes, but is not limited to, the research, development, commercialization, **manufacturing**, and implementation of innovative treatments, diagnostic tools, healthcare related software, medical devices, services, and equipment that supports the study, protection and improvement of plant, animal and human life.

Examples of life science industry practices include specialization in biomedicine, biochemistry, pharmaceuticals, biophysics, neuroscience, cell biology, biotechnology, medical devices, nutraceuticals, health-technology, botany and advanced agricultural development, cosmeceuticals, and life systems technologies. This industry also includes firms that manufacture either finished or interim advanced technologies or components.

Exclusions from this industry include direct provision of health care services in hospitals, outpatient facilities, dentist offices, nursing homes, or within a home setting.

**Hemp processing industry** refers to activities in compliance with the federal Agriculture Improvement Act of 2018 (also known as the 2018 Farm Bill) and any applicable regulations regarding hemp processing promulgated by the New Jersey Department of Agriculture, United States Department of Agriculture, or the United States Food and Drug Administration, including but not limited to, the research, development, commercialization, processing and **manufacturing of commercial and industrial hemp products** derived from hemp seeds, oil, fibers and shives for commercial use, including in the automotive, construction, food and beverage, personal care, and textile industries.

The term also includes research and development activities that advance hemp processing equipment and technologies for production, testing, and manufacturing operations, provided that such activities comply with the above-referenced laws and regulations. **This industry also includes firms that manufacture either finished or interim advanced technologies or components.**

The hemp processing industry excludes hemp grown for personal use or with a tetrahydrocannabinol (THC) concentration of 0.3% or greater.

**Information technology industry** includes, but is not limited to, the research, development, and commercialization of advanced software products and information technology services.

Information technology industry includes specialization in application and software development, advanced data analytics, artificial intelligence, blockchain related development, eSports, cybersecurity, cloud computing, provision of web services or servers, telecommunications, mobile communications services, provision of software as a service and other computing technologies.

Information technology industry does not include retail IT service providers, software implementation services that utilize customized product implementations, third party technology implementation to utilizes off-the-shelf solutions, website design services, social media or marketing services, and businesses from other industries that generally utilize technology to support their business operations.

**High technology industry** includes, but is not limited to, the research, development, commercialization, and **manufacturing of technology hardware**, technology processes, electronics, and technology-based components.

High technology industry also includes specialization in microelectronics, telecommunications, electronics equipment and components, advanced computing hardware, data storage hardware, advanced optical products and equipment, advanced sensor and instrumentation development, digital imaging, electromagnetics, mobile communication devices and infrastructure, semiconductors and semiconductor equipment.

**This industry also includes firms that manufacture either finished or interim advanced technologies or components.**

**Finance and insurance industry** includes, but is not limited to, the research, development, commercialization and management of financial and risk-management solutions, products and services for individuals, businesses and government agencies, including insurance lines, investment banking, depository and lending, and investment management services.

The finance and insurance industry may include technology driven financial innovations generally referred to as fintech, research and development activities that advance finance and insurance industry practices, including executing financial transactions. The finance and insurance industry may also include wagering platforms and related products and services, cryptocurrencies and related products and services, and regional or global headquarters of finance and insurance operations.

Excluded from this industry are retail banks, insurance, or wagering operations, real estate or leasing companies, and short-term or “payday” lenders operations.

**Professional services industry** includes global headquarters, regional headquarters, or major service hubs (such as innovation centers or centers of excellence) of knowledge-economy based businesses, from which customers or operations across multiple states or countries are served.

Examples of knowledge-economy based businesses considered providing professional services include firms that specialize in consulting, accounting, advertising, law, marketing, architecture, design, and engineering firms.

Exclusions from this industry include local branch offices of professional services providers, real estate agents, travel agencies, local contractors or architects, trades-based services, financial planners, doctors, dentists, and other offices or business units where a material amount of the professionals require business licenses to operate in the State.

**Film and digital media industry** includes, but is not limited to, the production and management of media communications, processes and technologies for theatrical motion pictures, television and cable broadcast, streaming services, web-based platforms. Digital media may include spoken

word production and media software including video games. Research and development activities that advance media production, management and technology are also included.

Exclusions are productions intended for local broadcast and local performance venues, and companies and businesses that provide indirect sources of support to the production industry such as food services (including craft services and catering) and vehicle rentals used solely for transportation purposes.

**Non-retail Food and Beverages industry** includes, but is not limited to, the growing, processing, packaging, preservation and distribution of raw agricultural goods into consumer food products, including fresh prepared foods, packaged foods, and alcoholic and nonalcoholic beverages, aquaculture and fisheries.

The industry includes the regional or global headquarters for food-based businesses, breweries, wineries and major wholesale food distribution facilities. Research and development activities that advance food innovation technologies, commercialization, production, food distribution models and **manufacturing operations are also included** in the non-retail food and beverage industry.

Excluded from this industry include distribution businesses serving retail food customers, including grocery stores, farmers markets, community supported agriculture organizations, bodegas, or convenience stores, and establishments that serve food and beverages, including restaurants, cafeterias, cafés, fast-food, pubs, delis, and catering businesses.