



ECOTOMIC GROUP, INC.

PREVIEW OF FURNITURE MANUFACTURING RE-SHORING PRESENTATION

The presentation shows the step-size evolution that is required to transition from traditional furniture manufacturing to standard (a single) manufacturing architecture that can re-shore America's furniture manufacturing & address the idiosyncrasies of international furniture markets. For the present America alone has the position among nations, the talent, the infrastructure resources, the science, the entrepreneurially experienced and other ingredients to be headquarters so that American furniture manufacturing might be re-shored then expanded by being licensed to other countries. The new standardized manufacturing facility has been named **Cleared Path Manufacturing (CPM)**. **CPM is illustrated in a 55" X 55" graphic – Page 9 on the menu provided for PC navigation of the presentation. A print version of the presentation is provided to give a good view of CPM contiguous with the other 8 pages & headlines that extend across multiple pages.** Non-provisional patents have been filed in the US. Provisional patents have been filed in 152 other countries.

No country using **CPM** will have its decorative panel furniture industry off-shored like has happened to America, Canada, Western Europe and Great Britain in recent years. Volumes to be re-shored in those countries are approximately: America \$50B - GB £18B – Canada C\$10B – Western Europe €85B. The off-shoring that took place also destroyed Ecotomic's business. The presentation begins with chronicling the project in 1965 & follows it into 2018. The project is now positioned to move as fast as the amount of money available to push it. There is no debt against the on-going project or the developed technology that drives it. There is one patent holder. The years of developing the nerdy foundational technologies that didn't yet exist are in the rear view mirror. Professionals schooled in the new digital sciences can now take charge. The presentation explains & illustrates the hand-off-to-professionals clearly. It is the difference between shovel-ready & not. This project is shovel-ready. At the heart of America was the up to 70,000 manufacturing sites spread across the country that have been lost to off-shoring. Many of those factories grew out of the Interchangeable parts concept that was championed by Presidents Washington & Jefferson. America's aggressive pursuit to mature the interchangeable parts concept made the country a magnet for the then emerging machine tools. In time entrepreneurs like Eli Whitney, Sam Colt, & Henry Ford built factories where the machine tools could produce the interchangeable parts then began working on assembly concepts. You know the story. The **CPM** presentation mirrors a similar pathway. BUT! The **CPM** pathway is updated to leverage modern technologies, an updated workforce/workplace & today's global opportunities. It's a great entrepreneurial opportunity – perhaps without equal. Some of the specific attributes that enable re-shoring America's decorative panel furniture manufacturing & taking advantage of global opportunities can be defined in general terms – and so the bulleted text below...

- Licensing an entire manufacturing industry to other countries as a means of bringing back \$hundreds of millions in cash flow for investment in America while imbedding security that prevents the intellectual property that drives the industry from being stolen, duplicated or compromised! **CPM** is conceived in light of the multiplying business risks to come!
 - Maximizing efficiencies of scope & scale by producing to the idiosyncrasies of the international market with one standardized manufacturing architecture!
 - Combining the low unit costs of mass production with marketing power of personalized production!
 - Distributed manufacturing inside a country so production is close to the customer & supports all geographies therein!
 - Competing with state-owned monopolies while preserving & transplanting American free enterprise & competitiveness!
 - Transitioning industries (many factories simultaneously) using a platform of common transitioning technologies!
 - Utilizing legacy assets to lessen costs & disruptions when transitioning from traditional to digitized operations!
 - A manufacturing workplace that utilizes the workforce needed to sustain American wealth-creation for the long term!
- The presentation reflects all the above ideas & concepts + others of a geeky kind...
- Like eliminating rounding errors while optimizing googol-size combinatorial problems!
 - Like engineering a data source that enables transitioning manufacturing from device-driven-everything & people control to software-driven-everything & digital control

The presentation shows how to apply the above ideas & concepts & others specifically to re-shoring USA's decorative panel furniture manufacturing. The above text is free of furniture trade language. The presentation text includes trade language.

The data-rich software-driven-everything **CPM** workplace is also a laboratory. The transition from device-driven-everything to software-driven-everything along with a single manufacturing architecture, self-learning software & data analytics reduces the timeframe & costs for linking research/development & implementation. **CPM** workplaces, working in concert with the network's Virtual Platform, will create new technologies, artificial intelligence, algorithms that solve increasingly complex operational challenges, define jobs that are yet to be defined & continuously create digital assets of ever increasing value. **CPM** will become increasingly less dependent on the long lag time that is now normal between research/development & workplace implementation. **CPM** is an economic fortress that will field a remarkable defense against all that threatens it, including cyber threats & threats to its markets. The business model develops into *'predictive'* from the traditional *'responsive'* -- definitely not your father's factory!