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Version 1.0 14.Feb.2019

(The following has been prepared for Nikolka Foundation and its principals)

NIKOLKA Foundation – Education and Training

Outline for a Program in Professional Vocational Education for Youth and Adults

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Program Mission Statement

Nikola Foundation is establishing and will provide, as part of its social functions:

- Professional vocational education for youth and adults, in mostly rural communities, beginning in Russia.
- Focus upon practical training in technologies, tools and products that are directly relevant to intelligent ("smart") agriculture, energy and environmental practices.
- Emphasis upon the ability of communities and businesses to intelligently and successfully adapt and optimize their operations under conditions of climate changes and extremes, including nonlinear and unpredictable situations affecting farming and food production, energy production and distribution, and the overall natural and social environment.

Climate dynamics and extremes are one of the most significant situations in our world today and demand attention in all levels of society. Nikolka Foundation aims to contribute to positive solutions through education and training for children and young adults, focusing upon smart farming, energy and environmental management practices.

Rural, low-income, low-population regions of the world including Russia will be very much affected by the changing environment and climate in coming years. There will be changes in urban and rural life within almost all countries and regions of the world. There will be changes in what foods and livestock can be raised, in how goods including agricultural products can be shipped and processed. There will be changes in population due to migrations within and between nations and regions of the world. Minimizing the turmoil and difficulty within a country's population, and being able to handle shortages as well as excesses of fresh water, are among the highest priorities now and upcoming for every nation and state. Educating people on how to live more sustainably and efficiently with respect to energy, water, food, fuel, and other resources, is essential for national and international stability, peace, and survival.

Not everything in the coming future is hard or bleak. There are also numerous positive opportunities for people, communities, businesses. A very significant factor for successful social and economic resilience and

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sustainability is in people being educated, trained, and professionally able to adapt to many changes and in the process to efficiently take advantage of and properly use many technologies. These include both traditional and even ancient methods, as well as modern ones that employ very advanced science and technology.

Russia will have many challenges, but also certain advantages and strong opportunities, as climate dynamics and extremes intensify and deepen, and as effects become pronounced in many parts of the world. These opportunities are particularly strong in the agricultural and energy sectors, and in environmental spheres concerning water, forests, and renewal resources. This is especially the case for Russia and for nations where Russia can be a leader in not only production and export of goods, but in transfer and export of knowledge, training, and services, especially within agriculture, energy and environmental management.

Nikolka will deliver a program that addresses youth from elementary school ages and levels up through high school and into adulthood, employing powerful methods of instruction, mentoring, and entrepreneurial development as well. Many of these methods draw upon the successes in history that led to the Renaissance and the modern Industrial Age, namely the methods of guilds and traditions of personalized, mentor-based education. Today, in the 21st century, Nikolka Foundation has the advantage of modern communication, media, and computing technologies and particularly the internet. This enables Nikolka, through this Program, to reach more students and learners in more diverse community locations, and also to draw upon a worldwide fellowship of experts, teachers, mentors, advisors, and specialists.

Youth in particular are central to Nikolka's program. The Foundation is concentrating its initial activities upon youth who have traditionally been neglected in poor family and social environments, and who for a variety of reasons have been neglected and often deemed to be dysfunctional and less capable than others who have been attending and often succeeding in school environments. Nikolka's aim is to apply proven and refined methods of vocational education to a very mixed and diverse population of students, through onsite and also online activities, and to cultivate, using guild methods and other traditional as well as new approaches, a population of capable young engineers, technicians, craftspersons and tradeworkers. The Nikolka program also accommodates adults – there is no age limit for learning, for training, for retraining and developing a new career.

Smart agriculture ("smart farming") is not limited to advanced new technologies such as computers, specialized sensors, UAVs, satellite data feeds and robots. There is a time and place for all of these technologies and more, but the Nikolka focus is upon people being able to work with appropriate tools and technology systems. Some of which may be highly automated and employing sophisticated electronics and mechatronics, but some of which will be the skills and tools that have become less use and less visible on today's farms. This diversity in the Nikolka approach is based upon the view that a successful, vital and stable future will not depend only upon new technologies but also upon hands-on abilities and tools that will be important in situations where there is less technology available or where the work to be done will have a better yield through simpler methods. This is particularly the case with some agricultural and energy-related productivity.²

Nikolka Foundation begins its work slowly, diligently, with people and institutions in the regions of Kozelsk and Latushchino, and with important guidance in all social and educational matters from spiritual mentors at Optina Pustin and other centers. Like an oak tree, something strong and intended to last beyond one generation takes time to gestate and to begin growing. The "acorn" has been planted and is growing strong, firm, and tall.

For further information contact Marianna Tsepeleva.

² For example: "The Great Challenge: Farming, Food and Climate Change", a lecture by Michael Pollan, https://www.youtube.com/watch?v=eSjHN8zefak, and "The Climate Change Forecast: Its Roots and Outlook", a lecture by David Archer and Pierrehumbert, https://www.youtube.com/watch?v=tkUA98XSrTo