Hybrid power plant in the Republic of Altai is able to provide reliable, stable power supply for remote areas (See Figure 1).

Operating solar-diesel power plant has reduced by 50 percent the annual consumption of diesel fuel and saved 1.8 million rubles.

Developers are going to continue the experiment. Such power plants should be built in areas with high level of diesel generation. These are Yakutia, Tuva Republic, Transbaikal territory, Far East. It will lead to reducing budget expenditures.

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Rudnik, V.Ye., Ryndin, I.A., Obskov, A.V. New prototyping of Google Corp. will travel in Global Business: Google Glass National Research Tomsk Polytechnic University.

In our day and age, technology is omnipresent and an integral part of our live. However, although the main purpose of technology is to make our life easier, the reactions and opinions on technology are very diverse. Every people would like to make our life easier. Google glass can solve this problem. It is absolutely new design from Google. You can see the world more colorful. For example, you may capture all that happened during the day. Walking down the street, you often look into your smartphone and it may be dangerous for your health: you can stumble and fall. With Google glass you forget about it. Interaction with user happens by voice commands. Some words helps you enter the Internet, use map, and check weather. As a result, Google glass includes three main functions: augmented Reality, mobile telephony+ Internet, video diary [1].

Touchpad: A touchpad is located on the side of Google Glass, allowing screen. Sliding backward shows current events, such as weather, and sliding forward shows past events, such as phone calls, photos, <u>circle updates</u>, etc. Camera: Google Glass has the ability userstocontrolthedevicebyswipingthroughatimeline-likeinterfacedisplayedontheto take photos and record 720p HD video. While video is recording, the screen stays on while it is doing so. Display: The Explorer version of Google Glass uses a Liquid Crystal on Silicon (LCoS), field-sequential color, LED illuminated display. The display's LED illumination is first P-polarized and then shines through the in-coupling <u>polarizing beam splitter</u> (PBS) to the LCoS panel. The panel reflects the light and alters it to S-polarization at active pixel sites. The in-coupling PBS then reflects the S-polarized areas of light at 45° through the outcoupling beam splitter to a <u>collimating reflector</u> at the other end. Finally, the out-coupling beam splitter (which is a partially reflecting mirror, not a polarizing beam splitter) reflects the collimated light another 45° and into the wearer's eye [3].

Technical specifications it is based on Android 4.0.4 and higher, 640×360 Himax helloHX7309 LCoS display5-megapixel camera, capable of 720p video recording, Wi-Fi 802.11b/g, Bluetooth, 16GB storage (12 GB available), 682MB RAM, 3 axis magnetometer (compass).

Ambient light sensing and proximity sensor.

Voice commands (Base command: "ok glass", after that, you must say real command), gestures, recognized by touchpad and audio system with bone conduction [1].

Some voice commands: «ok, glass, recordavideo.», «ok, glass, takeapicture.», «ok, glass, google [search query].», «ok, glass, google photos of [search query].», «ok, glass, send a message to [name].», «ok, glass, send [name] that [message].», «ok, glass, how is the weather in [place]?».

Device Interface was demonstrated in video, February 2013. In March Google used exhibition to show first applications for the Glass. Currently the company is working over the sample for people with bad vision [2].

So whether technology is aiding our life and making it easier, or creating new challenges and stress for us, really depends on how we react and interact with the new technologies. If -- when technology solves one of our problems -- we keep immediately coming up with new, larger problems, no technology will ever be able to satisfy our constantly new needs. However, if we allow technology to make our life easier, and focus more on the quality, rather than the quantity of life, and also learn how to use technology to our greatest advantage -such as how to use it to influence others -- we can all greatly benefit.

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Ryskeldi, M., Matukhin, D.L. Economic efficiency of the transition from conventional to renewable power engineering

National Research Tomsk Polytechnic University.

At the beginning of the XXI century world consumption of energy exceeded 500 EJ/year (1 EJ = 1018 J) or about 12 billion year. According to various forecasts by 2020 world power consumption will increase more than by one and a half times. Requirement of the population increase with increase in the population. In the conditions of gradual exhaustion of cheap stocks of organic fuel opportunity full and with acceptable expenses of satisfaction of growing energy needs causes serious fears. The nuclear power after a number of serious accidents on the nuclear power plant yet doesn't cause trust of the public. Besides, energy consumption by mankind makes only about 2/10000 total receipts of energy of sunlight on Earth surface. At the same time, in comparison with the energy going for processes of photosynthesis (about 40 TVt), the world power is commensurable and, by estimates, reaches about 20% of it that points to basic possibility of noticeable global influence of power on the biosphere. The power is responsible approximately for 50% of all harmful anthropogenous emissions in environment, including greenhouse gases[1].

Mankind for a long time I am familiar with renewables. Such types, which, in process of human size not exhaustible, ecological pure both an economic favorable electric and thermal power source. Renewables are the sun, a wind, oceanic inflow, warmly terrenewabltrial