The Ukrainian energy system is subject to new attacks. That is why the government is preparing for all possible scenarios of the development of events. We are activating the import of energy generating means. Every Ukrainian can import a generator or a charging station from abroad without paying customs duties and VAT.

— Denys Shmyhal
Prime Minister of Ukraine

November 21, 2022, day 271 of a full-scale Russian military invasion into Ukraine. Russia, having suffered a defeat on the battlefield (including recent Ukraine’s retaking of Kherson), as a terrorist state, switched to the tactics of shelling the objects of the critical energy structure of Ukraine. These attacks by cruise missiles and kamikaze drones lead to numerous daily emergency and planned power outages in populated areas of Ukraine, and particularly in Kyiv.

Small businesses in Kyiv are adapting and mass buying and switching to gasoline generator sets (Fig 1A, B). According to the Cabinet of Ministers of Ukraine as of November 21, 2022, about 8,500 generator sets are imported per day. Private dental practices are no exception, and in order to provide uninterrupted patient care and stable business operation incur such costs as investing in generator set of their own. Clinics that perform long surgical procedures (e.g., wisdom teeth removal, sinus lifts, alveolar bone augmentation, dental implants placement, etc.) need such generator sets especially.

Although for the small coffee shops a 5-kW generator sets (Fig 1B) is sufficient, a 10-kW gasoline generator set (like GM Daewoo, GDKM13500E, Bupyeong, South Korea) for the uninterrupted work of private practice is a preferred one (Fig 1C). It has an increased to 30 liters capacity of the fuel tank, working time up to 20 hours, electric and manual start. Its price on the Ukrainian internet market is within 132,200 UAH (i.e., $3,595 USD). The sellers also offer installment plan for such type of generator sets. This amount can be paid in installments of 3, 6 or 10 payments what makes it easier for small businesses.
such purchase a much more affordable for the practice owners. Moreover, it’s a great luck that Ukrainian market as of 2022 offers such a huge number of generators set models.

Thus, rethinking this wartime situation and the forced urgent investment in a gasoline generator set, you can look at it as follows. You can consider the urgent purchase of a generator, as well as the purchase of a dental chair, a set of surgical instruments, an orthopantomograph, a cone-beam computer tomograph, etc. by the clinic. Compared to investments in other equipment, a gasoline generator set is not such an expensive purchase. At the same time, it will allow you to make your private practice as autonomous as possible even when the lights are turned off, even in peacetime or during natural disasters. Such a step will ensure the uninterrupted operation of the institution of your dreams and will further increase the reputation of your institution in the eyes of patients, employees, and colleagues.

And although there are fewer blackouts now, I want everyone to understand: most likely, Ukrainians will have to live in blackouts until at least the end of March [2023].

—Serhiy Kovalenko
CEO, YASNO Energy Resource Supplier

REFERENCES (9)

1. The government is preparing for all possible scenarios due to attacks on the energy system of Ukraine – Shmyhal. Ukrinform [in Ukrainian] [internet]; Nov 20, 2022 [cited 2022 Nov 21]. Available from: https://www.ukrinform.ua/rubric-economy/3618395-urad-gotuetsa-do-vsih-mozlivih-

FIGURE 1. Gasoline generator sets.


t?gclid=Cj0KCQiA4ObbBhCzARIsA1cfn9k592-StpFrFxFVDrnVqoCoKRCR083j1PzoOJGHj2gt_6H
FKa3ywKsKAsXyEALw_wcB