Photon Energy Group

Photon Energy Group Strategy Guidance, 2021–2024

The management board of Photon Energy N.V. presents its strategy guidance for 2021 to 2024.

In the light of significant advances in solar energy generation technologies, the management board has fine-tuned its strategy in order to capitalise on the ever-expanding worldwide opportunities in the solar and water industries and to accelerate the Group's growth.

Introduction: Strategic Goals

The key pillars of our strategy focus on the expansion of our electricity generation asset base, creating multiple recurring revenue streams from our fully-integrated energy business model and on the development of our water business with a particular focus on addressing the growing global issue of PFAS (per- and polyfluoroalkyl substances) contamination through the Group's patent-pending nanoremediation technology.

Quantitative Targets per Business Segment by 2024

To achieve the Group's strategic goals outlined above, the management board intends to grow each business segment in the following manner until year-end 2024:

i) *Investments*: **expand our proprietary portfolio from 74.7 MWp across utility-scale and behind-the-meter PV and RayGen PV Ultra power plants to a total installed capacity of at least 600 MWp** in operation and to **increase recurring revenue streams from clean electricity generation and grid support services**. Furthermore, by year-end 2024 we intend to **control a solar energy project pipeline at various stages of development** – including both projects developed in-house and co-developments – of **1.5 GWp to drive further growth beyond 2024.**

ii) *Energy Solutions*: further grow our engineering, procurement and construction (EPC) business by leveraging existing experience and know-how into customised grid-connected and **decentralised energy generation solutions** in combination with cutting-edge **energy storage technologies**.

iii) *Operations & Maintenance*: grow our operations and maintenance (O&M) services to **maximise the energy generation output** of proprietary and clients' power plants and to **optimise the useful life of PV assets.** By year-end 2024 we intend to have at least **1.0 GWp** of proprietary and clients' power plants under contract compared to the current total capacity of 300 MWp.

iv) *Technology distribution*: benefit from the boom in the solar energy industry and **utilise existing economies of scale** through an upcoming B2B online sales platform to generate **additional trading revenues from PV modules, inverters, batteries and other components.**

v) *Water*: grow across our suite of water services and products and become a leading worldwide player in the PFAS remediation industry on the back of our proprietary patent-pending nanoremediation technology (and other technologies under development) so as to **develop our water business line into the second pillar of our Group's activities.**

Financial Metrics

Until 2024 the management board projects the Group's **EBITDA to grow five-fold** compared to 2020 levels, not including the substantial upside from the targeted dynamic worldwide roll-out of our proprietary nanoremediation technology. The Group's business plan will be financed from a combination of operating

cash flows, the sale of solar energy project rights, the re-financing of the Group's existing portfolio, proceeds from the issuance of new bonds, and the sale of treasury shares currently held by the Company. The management board is committed to managing the Group's consolidated balance sheet so that its **equity ratio will remain above 25%** for the duration of the outlined period.

In order to secure the required funding for the implementation of the Group's strategy, the management board intends to offer up to 7 million of its existing treasury shares, currently valued at around EUR 18 million. The proceeds from the sale of these existing treasury shares will be used primarily to invest in the development of new projects and the construction of projects brought to the ready-to-build stage.

The Group's strategy outlined above is based on the following assumptions:

i) **Growth of the proprietary portfolio via intensified project development efforts.**

PV technology has become one of the most cost-competitive and fastest growing energy resources, with the weighted average LCOE in the PV industry declining by more than 80% from 0.37 to 0.07 USD/kWh over the last decade. For utility-scale projects, PV technology has reached grid-parity and is competing successfully with conventional energy sources. No other energy source is so abundantly available, nor provides the same flexibility in scalability and applications, from prosumers to utility-scale projects. As such, it is not surprising that solar energy has been the fastest growing renewable energy source over the previous decade. This trend is expected to continue going forward. According to the International Renewable Energy Agency, global solar PV capacity is expected to develop dynamically, with an average annual growth of 6.3% until 2050 under current national RES plans (including accelerated 11.1% CAGR to 2030). The outlook for the EU solar market may significantly change in the near future due to the probable introduction of the European Green Deal currently under development in Brussels. A crucial part of the Green Deal will be investments in solar power generation. Another driver which will support solar energy penetration will be the electrification of road transport, which exhibits many synergies with solar energy and battery storage systems.

Given the above market trends, the management board has decided to focus its growth strategy on the further accelerated expansion of the Group's proprietary portfolio of PV power plants and its solar generation capacity. It is assumed that the expansion of the proprietary portfolio will be fuelled by a growing pipeline of PV projects, developed in-house or through acquisitions and through a network of co-developers. Therefore, accelerated project development efforts represent the backbone of the Group's growth strategy. Securing projects rights and utilising a hands-on approach in the early stages of PV development ensure the full control of project rights, the optimisation of project economics and the maximisation of the rate of returns on PV projects. If the pipeline of ready-to-build projects were to outpace the growth of the Group's balance sheet capacity, the project rights could be sold to a third party.

In terms of geographical breakdown, further expansion of the proprietary portfolio is mainly expected in Poland, Hungary, Romania and Australia. The Czech market is also under scrutiny but any investment decision will depend on further legislative changes, which are currently under discussion. Additional markets will be continuously evaluated.

As far as the project size and type is concerned, the sweet spot for project size in Central Europe falls within a range of 5-15 MWp. The Group is interested primarily in commercial, utility-scale projects (based on PPA) and behind-the-meter projects, in which the energy offtaker may also secure project financing. The transition to a market-based, commercial business model will be facilitated in the synergistic co-operation with Lerta, a Polish investee company, in which Photon Energy N.V. holds a minority stake.

On the Australian market, the Company intends to develop, build and invest in projects based mainly around concentrated solar and PV-generation technology paired with energy storage, a unique technological solution developed by RayGen Technology. The Group invested and signed up for a strategic partnership with RayGen in 2020.

In the management board's opinion, this shall support the growth of recurring revenue streams from clean electricity generation, which is the core aim of the growth strategy.

ii) Expansion of the proprietary portfolio will boost our supplementary operating segments.

Project development and portfolio expansion will also boost supplementary operating segments, such as energy solution EPC services, technology distribution and the provision of long-term O&M services. The ownership of project rights with a high level of control will allow the Company to lock-in these supplementary services.

Leveraging extensive experience in various markets and utilising industry-leading engineering and technology expertise, the Group intends to compete for PV projects which aim to address the need for the provision of clean energy in locations which require a tailor-made approach for complete energy systems, combining the generation of clean energy with energy storage solutions. Such PV projects require an integrated approach in the application of PV technology which, in the opinion of the management board, the Group is able to provide competitively. Given the large scale of Group-internal business, the supplementary operating segments benefit from economies of scale and are able to offer competitive terms to external clients.

iii) Opportunities will arise upon the validation of proprietary nanoremediation technology which removes PFAS contaminants from ground water.

The main focus of the growth strategy in the Photon Water business line addresses the problem of groundwater contamination with per- and polyfluoroalkyl substances (PFAS). PFAS are emerging pollutants with increasing health and environmental concerns. Common applications of PFAS include fire-fighting foams and surfactants, textile, metal plating, cleaning products, plastics and hydraulic fluids. Therefore, the most common pathways to PFAS contamination include fire-fighting activities and the infiltration of surface water to groundwater. This is most prevalent at airports, military bases and firefighting training facilities. PFAS compounds are thermally stable, repellent to water and oil, and highly soluble.

The persistence of PFAS contamination in various matrices poses significant risks to human health and the natural environment, which translate to health-related costs and remediation/treatment costs. The meticulous resolution of PFAS contamination demands significant investment in all phases of remediation, from monitoring to the completion of excavation, the treatment of soil and disposal of hazardous PFAS waste.

Photon Water has done substantial research and made significant technical advances associated with its patent-pending proprietary nanoremediation technology, intended to address the problem of PFAS contamination. This nanoremediation technology indicates an ability to break down PFAS within groundwater (i.e. in-situ), without the need for pumping and surface treatment or disposal processes.

In September 2020, Photon Water entered into a contract with the Australian Government Department of Defence, with the commencement of a trial phase PFAS remediation program.

On the back of this project, Photon Water's strategy is to deliver efficient and cost-effective initiatives to remove PFAS from the environment. The removal of PFAS through in-situ treatment is globally unique, and the Company is very focused on working with the Department of Defence to demonstrate the efficacy of this technology, support the community, and deliver an environmentally and commercially successful solution. Upon completion of this trial phase, Photon Water expects to commercialise the technology globally.

Glossary:

PV power plant	A photovoltaic power plant, consisting of solar modules, through which solar radiation is directly transformed into electrical energy.
MWp/GWp	Megawatt peak/gigawatt peak. The maximum power output electric power of a photovoltaic system measured under Standard Test Conditions.
EBITDA	Earnings before interest, tax depreciation and amortisation for a respective period. Defined as earnings on continuing operations for the period before interest, taxes, depreciation and amortisation and can be derived from the consolidated financial statements of the group.
Equity ratio	The consolidated company group equity at the end of a given period, divided by the sum of total consolidated company group equity and liabilities at the end of a given period. Can be derived from the consolidated financial statements of the group.
LCOE	Levelized cost of electricity.
RES	Renewable energy sources.
CAGR	Compound annual growth rate.
PFAS	Per- and polyfluoroalkyl substances.