



NexGen Releases 2022 Sustainability Report

Vancouver, BC, April 26, 2023 – NexGen Energy Ltd. ("NexGen" or the "Company") (TSX: NXE) (NYSE: NXE) (ASX: NXG) is pleased to announce the release of its 2022 Sustainability Report ("the Report") that covers the period January 1 to December 31, 2022. The Report marks the third year that NexGen has reported on the Company's robust Environmental, Social and Governance (ESG) profile and is the first report that fully incorporates all aspects of Global Reporting Initiatives (GRI) compliance. The Report is available online on the Company's website:

<https://nexgenenergy2021corp.q4web.com/sustainability/default.aspx#esg>

Leigh Curyer, Chief Executive Officer, commented: "2022 was a year of significant achievements for NexGen, which are a direct reflection of the Company's values in action. NexGen again extended its reach, expanded its community programs, and increased its impact with meaningful initiatives for optimal Indigenous, community, and stakeholder benefits. The Company also completed important environmental work that has been undertaken to further optimize and enhance the benefits as we advance the Rook I Project through the regulatory process. We are proud to be working diligently and responsibly to deliver clean energy fuel for the globe to meaningfully and positively impact the energy transition, access to energy and energy security, all while creating generational benefits for all of our valued stakeholders."

Highlights in the Report Include:

Unprecedented Engagement

2022 marked an unprecedented number of key engagements, including Joint Working Group meetings, Implementation Committee and Environment Committee meetings, open houses, presentations, signings, site visits and tours, workshops, community newsletters and monthly radio announcements, and informal discussions.

Environmental Assessment

The Report outlines the critical environmental work that has been undertaken through the finalization and submission of the Environmental Impact Statement (EIS) for the development of the Rook I Project (the Project), which incorporates a decade of detailed data collection, analysis, and design, and highlights the Company's long-term and disciplined planning approach for elite environmental and social outcomes for local communities, the Province of Saskatchewan, and Canada. Further, the 2022 Report includes additional disclosures on energy consumption by fuel type, water management activities involved in the day-to-day running of NexGen's Rook I camp and use during drill programs, and waste processing and management.

Expanded Community Programs

NexGen expanded community programs for youth in the areas of health and wellness, education, training, and career development, including the funding for a series of trades training and certification programs that are foundational to the creation of meaningful employment and a sustainable economy for communities local to the Rook I Project.

Greenhouse Gas ("GHG") Emissions Inventory

The Report includes the Company's second GHG emissions inventory, including Scope 1 (direct), Scope 2 (indirect from the generation of purchased electricity), and Scope 3 (other indirect – business travel) emissions as well as biogenic carbon associated with land use change. NexGen's GHG emissions in 2022 totalled 3,763 tonnes of carbon dioxide equivalent.

NexGen will continue to optimize its Sustainability reporting in line with the Company's elite standards approach to all aspects of its business.

About NexGen

NexGen Energy is a Canadian company focused on delivering clean energy fuel for the future. The Company's flagship Rook I Project is being optimally developed into the largest low-cost producing uranium mine globally, incorporating the most elite environmental and social governance standards. The Rook I Project is supported by a NI 43-101 compliant Feasibility Study which outlines the elite environmental performance and industry-leading economics. NexGen is led by a team of experienced uranium and mining industry professionals with expertise across the entire mining life cycle, including exploration, financing, project engineering and construction, operations, and closure. NexGen is leveraging its proven experience to deliver a Project that socially, technically and environmentally leads the entire mining industry. The Project and prospective portfolio in northern Saskatchewan will provide generational long-term economic, environmental, and social benefits for Saskatchewan, Canada, and the world.

NexGen is listed on the Toronto Stock Exchange, the New York Stock Exchange under the ticker symbol "NXE," and on the Australian Securities Exchange under the ticker symbol "NXG," providing access to global investors to participate in NexGen's mission of solving three major global challenges in decarbonization, energy security and access to power. The Company is headquartered in Vancouver, British Columbia, with its primary operations office in Saskatoon, Saskatchewan.

Contact Information

Leigh Curyer
Chief Executive Officer
NexGen Energy Ltd.

+1 604 428 4112

lcuryer@nexgenenergy.ca

www.nexgenenergy.ca

Travis McPherson
Chief Commercial Officer
NexGen Energy Ltd.
+1 604 428 4112
tmcpherson@nexgenenergy.ca
<http://www.nexgenenergy.ca>

Monica Kras
VP, Corporate Development
NexGen Energy Ltd.
+44 7307 191933
mkras@nxe-energy.ca
<http://www.nexgenenergy.ca>

Technical Disclosure

All technical information in this news release has been reviewed and approved by Kevin Small, NexGen's Senior Vice President, Engineering and Operations, a qualified person under National Instrument 43-101. A technical report in respect of the FS is filed on SEDAR (www.sedar.com) and EDGAR (www.sec.gov/edgar.shtml) and is available for review on NexGen Energy's website (www.nexgenenergy.ca).

Cautionary Note to U.S. Investors

This news release includes Mineral Reserves and Mineral Resources classification terms that comply with reporting standards in Canada and the Mineral Reserves and the Mineral Resources estimates are made in accordance with NI 43-101. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. These standards differ from the requirements of the Securities and Exchange Commission ("SEC") set by the SEC's rules that are applicable to domestic United States reporting companies. Consequently, Mineral Reserves and Mineral Resources information included in this news release is not comparable to similar information that would generally be disclosed by domestic U.S. reporting companies subject to the reporting and disclosure requirements of the SEC. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.

Forward-Looking Information

The information contained herein contains "forward-looking statements" within the meaning of applicable United States securities laws and regulations and "forward-looking information" within the meaning of applicable Canadian securities legislation. "Forward-looking information" includes, but is not limited to, statements with respect to mineral reserve and mineral resource estimates, the 2021 Arrow Deposit, Rook I Project and estimates of uranium production, grade and long-term average uranium prices, anticipated effects of completed drill results on the Rook I Project, planned work programs, completion of further site investigations and engineering work to support basic engineering of the project and expected outcomes. Generally, but not always, forward-looking information and statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or the negative connotation thereof or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" or the negative connotation thereof. Statements relating to "mineral resources" are deemed to be forward-looking information, as they involve the implied assessment that, based on certain estimates and assumptions, the mineral resources described can be profitably produced in the future.

Forward-looking information and statements are based on the then current expectations, beliefs, assumptions, estimates and forecasts about NexGen's business and the industry and markets in which it operates. Forward-looking information and statements are made based upon numerous assumptions, including among others, that the mineral reserve and resources estimates and the key assumptions and parameters on which such estimates are based are as set out in this news release and the technical report for the property, the results of planned exploration activities are as anticipated, the price and market supply of uranium, the cost of planned exploration activities, that financing will be available if and when needed and on reasonable terms, that third party contractors, equipment, supplies and governmental and other approvals required to conduct NexGen's planned exploration activities will be available on reasonable terms and in a timely manner and that general business and economic conditions will not change in a material adverse manner. Although the assumptions made by the Company in providing forward looking information or making forward looking statements are considered reasonable by management at the time, there can be no assurance that such assumptions will prove to be accurate in the future.

Forward-looking information and statements also involve known and unknown risks and uncertainties and other factors, which may cause actual results, performances and achievements of NexGen to differ materially from any projections of results, performances and achievements of NexGen expressed or implied by such forward-looking information or statements, including, among others, the existence of negative operating cash flow and dependence on third party financing, uncertainty of the availability of additional financing, the risk that pending assay results will not confirm previously announced preliminary results, conclusions of economic valuations, the risk that actual results of exploration activities will be different than anticipated, the cost of labour, equipment or materials will increase more than expected, that the future price of uranium will decline or otherwise not rise to an economic level, the appeal of alternate sources of energy to uranium-produced energy, that the Canadian dollar will strengthen against the U.S. dollar, that mineral resources and reserves are not as estimated, that actual costs or actual results of reclamation activities are greater than expected, that changes in project parameters and plans continue to be refined and may result in increased costs, of unexpected variations in mineral resources and reserves, grade or recovery rates or other risks generally associated with mining, unanticipated delays in obtaining governmental, regulatory or First Nations approvals, risks related to First Nations title and consultation, reliance upon key management and other personnel, deficiencies in the Company's title to its properties, uninsurable risks, failure to manage conflicts of interest, failure to obtain or maintain required permits and licences, risks related to changes in laws, regulations, policy and public perception, as well as those factors or other risks as more fully described in NexGen's Annual Information Form dated February 24, 2023 filed with the securities commissions of all of the provinces of Canada except Quebec and in NexGen's 40-F filed with the United States Securities and Exchange Commission, which are available on SEDAR at www.sedar.com and Edgar at www.sec.gov. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information or statements or implied by forward-looking information or statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Readers are cautioned not to place undue reliance on forward-looking information or statements due to the inherent uncertainty thereof.

There can be no assurance that forward-looking information and statements will prove to be accurate, as actual results and future events could differ materially from those anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking statements or information. The Company undertakes no obligation to update or reissue forward-looking information as a result of new information or events except as required by applicable securities laws.