



**Subject: Inclusion of Agrivoltaics in Section 4.3 of the Proposed Provincial Planning Statement (2023)**

Dear Ontario Planning Act Review Committee,

On behalf of Agrivoltaics Canada, Canada's industry group dedicated to the promotion and education of agrivoltaics which lie at the intersection of agriculture and renewable energy, we write to express our strong support for the inclusion of agrivoltaics in Section 4.3 of the proposed Provincial Planning Statement (PPS, 2023) under the Ontario Planning Act. We firmly believe that agrivoltaics, the co-development of land for agriculture and solar power, aligns seamlessly with the key objectives of Ontario's PPS and holds immense potential for enhancing sustainable land use, rural economic prosperity, biodiversity conservation, and climate change mitigation and adaptation.

The proposed PPS (2023) seeks to provide direction on matters of provincial interest related to land use planning and development, as well as protect provincial interests, including resources, public health and safety, and the quality of the natural and built environment. Section 4.3 specifically addresses On Farm Diversified Uses, which we believe should explicitly include agrivoltaics, given the numerous benefits it can provide in terms of economic prosperity, biodiversity conservation, and climate change mitigation and adaptation.

Agrivoltaics presents an innovative solution to address the global challenges of food security, renewable energy generation, and water conservation simultaneously. By integrating agriculture and photovoltaic solar energy generation on the same land, this practice offers numerous synergistic benefits that directly contribute to the objectives set forth by the proposed PPS.

### 1. Economic Prosperity:

Ontario's farmers are facing significant challenges, with farm debt reaching all-time highs in 2020. It is crucial for farm operators to diversify their income streams and improve the productivity of their land. Agrivoltaics offers a unique opportunity to achieve these goals. By combining traditional crop cultivation with the simultaneous production of electricity, farmers can enhance their land utilization, generate additional revenue, and mitigate the economic risks associated with uncertainty and fluctuating commodity prices. The integration of agrivoltaics within Section 4.3 of the proposed PPS aligns with the objective of fostering a strong, internationally competitive economy.

### 2. Land Productivity Improvement:

Agrivoltaics allows for the continued cultivation of traditional crops while harnessing solar energy, thus maximizing the productivity of agricultural land. By strategically siting solar panels above crops, farmers can optimize land use, increase crop yields, and simultaneously generate clean electricity. This dual-use approach enhances food production and renewable energy generation, enabling farmers to adapt to evolving environmental stresses, market demands while also contributing to the province's rising energy needs. By including agrivoltaics in the PPS, Ontario recognizes the importance of sustainable land use practices that unlock the potential for enhanced agricultural productivity. We want to emphasize that to qualify as agrivoltaics, solar systems must be designed to support and enhance agricultural

production and not replace it as was done under the FIT program. We do not support displacing agricultural activity with solar.

### 3. Climate Change Adaptation and Mitigation

By providing shade, these systems can reduce water evaporation and help crops withstand extreme heat events, which are projected to become more frequent and intense due to climate change. This aligns well with the PPS's emphasis on promoting development and land use patterns that contribute to environmental sustainability and resilience, and that mitigate greenhouse gas emissions and adapt to the impacts of a changing climate. Increased biodiversity creates natural carbon sinks for CO<sub>2</sub>.

### 4. Job Creation in Rural Economies:

The integration of agrivoltaics will spur job creation and economic growth in rural areas. The development of agrivoltaic enhanced farms will require skilled labor for design, installation, and maintenance, providing both temporary and permanent employment opportunities. Additionally, increased investments in the renewable energy sector will attract progressive, forward-thinking companies to Ontario, further strengthening local and regional economies. By explicitly incorporating agrivoltaics into Section 4.3, the PPS promotes the expansion of rural job markets and revitalization of communities. Increasing the on-farm production of energy could also support farmers in economically producing additional farm inputs such as nitrogen-based nutrients and supply energy for some equipment. The future of farm work is slowly evolving towards automation, battery powered autonomous equipment is starting to make inroads, enabling farms to displace diesel use for farm equipment supports agricultural decarbonization goals.

### 5. Reinforcement of Local Electricity Distribution Systems:

Agrivoltaic systems, with their distributed solar generation, reinforce local electricity distribution systems by reducing strain on centralized power grids. By generating electricity closer to the point of consumption, agrivoltaics mitigates transmission losses and voltage fluctuations. This decentralized approach enhances grid resilience, improves power reliability, and contributes to a more sustainable and efficient electricity infrastructure. By embracing agrivoltaics in the PPS, Ontario demonstrates its commitment to a clean and robust energy future.

To ensure the successful integration of agrivoltaics into Ontario's agricultural landscape, we propose the following recommendations for Ontario to undertake in addition to inclusion of agrivoltaics in Section 4.3 of the proposed Provincial Planning Statement (2023):

1. Explicitly recognize agrivoltaics as an On Farm Diversified Use and include a definition of agrivoltaics to clarify its scope and function. Permit agrivoltaics to cover crop fields and not only ancillary use areas.
2. Develop and implement guidelines and best practices for agrivoltaic system design, installation, and management to ensure a balance between agricultural production and renewable energy generation, optimizing land utilization and productivity.
3. Support and encourage research and development in agrivoltaic technologies and practices, fostering innovation and collaboration among government agencies, academic institutions, and private entities to drive continuous improvement and knowledge-sharing.



4. Establish support mechanisms, such as streamlined permitting processes, financial incentives, and technical assistance, to encourage farmers and rural communities to adopt agrivoltaic systems, enhancing economic opportunities and farm resilience.
5. Promote public awareness and education on the benefits of agrivoltaics for sustainable land use, food security, and renewable energy generation, emphasizing the positive impact on local economies and job creation in rural communities.
6. Monitor and evaluate the implementation and effectiveness of agrivoltaic systems, allowing for the refinement of policies, guidelines, and support mechanisms as needed, to ensure continuous improvement and optimal outcomes.

Incorporating these recommendations into the Provincial Planning Statement (2023) will demonstrate a commitment to forward-thinking, sustainable land use practices that simultaneously address the pressing challenges of food security, renewable energy generation, and climate change adaptation and mitigation. Agrivoltaics has the potential to transform the agricultural landscape, strengthen the economy, create jobs in rural communities, and contribute to a more resilient and sustainable future for Ontario farmers and primary agricultural producers.

We appreciate the opportunity to provide input on the proposed Provincial Planning Statement (2023) and trust that our recommendations will be given due consideration. By including agrivoltaics in Section 4.3, the Provincial Planning Statement will promote sustainable and innovative land use practices that benefit the environment, the economy, and the well-being of Ontario's communities.

Please do not hesitate to contact us if you have any questions or require further information on agrivoltaics and its potential benefits.

Sincerely,

Rob Sinclair

Founder, Treasurer

Agrivoltaics Canada

[Robert.sinclair@enerstrat.ca](mailto:Robert.sinclair@enerstrat.ca)

416.388.4642