

BPOA Industry Needs Document



Current Industry Situation	Future Industry Position
1. Crop protection	
<p>a. Reliance on synthetic pesticides for pest, disease and weed control giving rise to resistance issues.</p> <p>b. Minimal understanding of and confidence in effective use of biopesticides.</p>	<p>Reduced reliance on synthetic pesticides resulting from:</p> <ul style="list-style-type: none"> ▪ Improved understanding of mode of action, target / stage of pest / disease/resistance issues. ▪ Increased use of bio-pesticides and biological control for pest, disease and weed control. ▪ Improvements to IPM / biological control. ▪ Wider deployment of alternative control methods including push and pull strategies, light spectrum modification designed to control P&D and plastic films.
<p>c. Application usually via hydraulic high volume methods including hand-held knapsack and powered trolley.</p>	<p>More efficient application of pesticides and biopesticides resulting in better efficacy, reduction in the volume of water and chemical applied.</p>

Current Industry Situation	Future Industry Position
d. Minimal use of forecasting and reliance on conventional methods of detection and diagnosis.	Increased use of forecasting pest and disease including: <ul style="list-style-type: none"> ▪ Early detection of pest and disease by remote monitoring allowing spot control. ▪ Use of state of the art diagnostics in identifying disease.
e. Capacity for improving use of climate control measures for P&D control.	Targeted management of glasshouse climate to minimise P&D outbreaks.
f. Reactive involvement in development of off-labels (EAMUs) relevant to the sector.	Proactive drive from the BPOA on the development of an off-label (EAMU) programme and maintenance of pesticide website.
g. Techniques for plants habit manipulation too dependent on applied PGRs.	Reduced reliance on chemical PGRs (ref objective 3).
2. Increase returns on capital investment and inputs by efficient use of resources.	
a. High labour costs per unit of production, increasing adoption of automation.	Wider use of available and new technology / automation with staff trained in new and required skills.
b. Working towards maximising the efficient use of all available energy sources.	Greater energy efficiency realised through: <ul style="list-style-type: none"> • Increased adoption of heat storage and use of alternative fuel sources.

Current Industry Situation	Future Industry Position
	<ul style="list-style-type: none"> • Energy efficiency benefits of hybrid systems (semi-closed glasshouses) being realised in practise. • Increased emphasis on low energy input and cold grown crops. • Integration of cost effective green energy systems for electricity e.g. solar and wind energy systems.
c. Insufficient understanding of nursery production costs.	Increased business sustainability facilitated through effective cost control.
d. Increasing cost of inputs.	<p>Cost effective use of inputs realised including:</p> <ul style="list-style-type: none"> ▪ Higher light transmission materials to maximise natural light. ▪ Solar radiation / screening. ▪ More efficient use of water: maximising efficiency of application systems (including overhead sprinkler systems), recycling of water and water treatments.
e. Waste levels determined by trading season.	<p>Effective control of waste:</p> <ul style="list-style-type: none"> ▪ Effective identification and control of factors contributing to increased waste plant material. ▪ Minimising waste, including cardboard, plastic, polystyrene and pesticides. ▪ Increased use of green waste. ▪ Use of biodegradable materials and packaging.

Current Industry Situation	Future Industry Position
3. Supply consistent quality produce, plants and flowers to achieve customer satisfaction.	
a. Quality of incoming plant material influencing and, on occasion, undermining production.	Access to reliable young plant, cutting and seed supplies.
b. Skilled crop management via a range of research driven agronomic techniques.	<p>Business sustainability underpinned by further developed crop management skills embracing current understanding of plant responses to environmental manipulation. Relevant techniques will include:</p> <ul style="list-style-type: none"> • Spectral manipulation (e.g. via LEDs / spectral filters). • Cost effective, supplementary lighting. • Day length lighting. • Growth control via physical / cultural methods to minimise PGR input.
c. Shelf life fundamental to product quality with specifications retailer driven.	<p>Products consistently meeting shelf life specifications through increased understanding of key drivers e.g:</p> <ul style="list-style-type: none"> ▪ Growing media / buffers ▪ Light spectrum ▪ Varietal differences ▪ Transport chain ▪ Home life
d. Good understanding of crop scheduling and establishment, but desire for increased control and flexibility.	Reliably managing crop establishment, scheduling and reactive scheduling in response to external influences e.g. weather / trading environment.

Current Industry Situation	Future Industry Position
e. Industry receptive to new and innovative crops.	Ongoing innovation of product supply underpinned by relevant technical information.
f. Current disconnect between producers and requirements of final customer.	Good appreciation of, and delivery to, consumer preferences.
4. Environmental practice and legislation.	
<p>Industry dealing with varied, extensive and increasing range of legislative demands, including:</p> <ul style="list-style-type: none"> ▪ Pesticide and disinfection. ▪ Water legislation. ▪ Fertiliser/irrigation legislation. ▪ Diffuse pollution. ▪ Composting/green waste/ growing media substrates. ▪ Packaging / recycling. ▪ Carbon footprint and life assessment. ▪ Energy legislation. ▪ Non-native pests and diseases. ▪ Labour 	<p>Businesses compliant with current legislation whilst remaining commercially viable.</p> <p>To be seen and perceived as a 'green' industry following best practice.</p>