

THE ALMOND BOARD: A TRUSTED RESOURCE

ABC is a trusted resource for data and industry expertise, providing stakeholders with valuable information on matters impacting the entire California almond industry.

As a Federal Marketing Order, ABC is precluded from any lobbying or advocacy activities meant to influence legislation or specific policies. However, USDA does not restrict ABC's ability to pursue many opportunities to share its expertise and fact-based information with government and other stakeholders.

ABC can **educate** but not **advocate**, and it uses that ability to support the industry in many ways.

To further engage on legislation or policy-related matters, ABC staff provides consulting expertise to the Almond Alliance of California – which is focused on advocacy – supplying valuable input in support of the Alliance's efforts to ensure the California almond industry has a seat at the table with legislators and policymakers.

GLOBAL TRADE STRATEGY

- In response to industry priorities, ABC's global trade strategy looks at both tariffs and technical barriers to trade with a focus on new horizon markets. The strategy is coordinated with and complements the demand building initiatives of ABC global marketing programs.
- Unimpeded market access is critical, and issues facing almonds reach back to the orchard, with a focus on sustainable production practices, climate and environmental priorities.
- In 2022, almonds were the #2 ag export to the EU (\$1.5 billion) and the #1 ag export to India (\$884 million), accounting for 39% of all U.S. ag exports to India.
- ABC is closely monitoring the EU's Green Deal and Farm-to-Fork policies that could restrict almond exports to both the EU and its trading partners.
- Retaliatory tariffs remain in key export markets – particularly in China, where the tariffs on almonds increased from 10% in 2018 to 55% in 2020.
- Australia enjoys 0% tariffs in China. Also, a trade agreement signed in 2022 with India allows 34,000 MT of Australian almonds to be imported at 50% of the normal MFN tariff levels.
- In 2023, India eliminated retaliatory tariffs on five US ag imports including almonds.
- ABC continues to keep the importance of export trade for almonds front and center with U.S. government officials.
- California almonds are represented in a number of ag coalitions addressing concerns related to production, trade impacts, technical issues and potential benefits of agreements.
- Market access for imports of almond hull pellets and cubes is anticipated to be finalized by China's Ministry of Agriculture by the end of 2023.

EXPORT TECHNICAL ISSUES

- ABC is viewed as a resource by government authorities in the U.S. and abroad for its wide-ranging, fact-based information concerning agricultural practices and trade flows.
- ABC staff helped 65 handlers finalize registration of their facilities for exports in compliance with China's Decree 248 food facility registration. These efforts avoided significant trade disruption and the registrations will be valid for the next five years.
- ABC worked with FDA/USDA to develop instructional videos and a protocol to assist new facilities to register for exports to China.
- Technical advisors and experts in key markets keep ABC updated on tariff or technical issues impacting almonds.
- Technical barriers to trade range from pesticide MRLs to labeling to certification requirements, all of which can disrupt almond shipments.
- ABC participates in global Codex Committee meetings dealing with technical issues including food contaminants, pesticides, import procedures and labeling.
- Since 2020, ABC has developed more than 35 comments to U.S. and global authorities that highlight the almond industry's responsible use of pest management tools.
- ABC continues to closely monitor U.S. government trade negotiations.
- California almonds are the only U.S. commodity recognized under the EU's Pre-Export Certification (PEC) regulation, which specifies < 1% inspection on import.
- Work continues on efforts with USDA/FAS to address Japan's 100% import control of almonds.
- ABC is engaging USDA and FDA to recognize USDA-approved labs for aflatoxin inspection to streamline U.S. Goods Return.

CLIMATE SMART AGRICULTURE

- California is the leader on mitigating emissions and sequestering carbon on working lands. Almond trees store carbon as they grow, plus the use of biomass and coproducts significantly reduces almonds' carbon footprint.
- Carbon taken from the air and stored in all the almond trees growing in California in 2022 (1.63 million acres) equates to 30 million metric tons of stored carbon, equal to the annual emissions of 24 million cars.¹
- The California almond industry has invested in research on climate smart agriculture, including Whole Orchard Recycling, planting cover crops, composting, fertilizer, emissions, and nitrogen and water management.
- ABC has used its research outcomes to develop grower guides for Whole Orchard Recycling, cover crops, irrigation and nitrogen management.
- ABC is exploring access for growers to ecosystem services markets for practices that store carbon, foster biodiversity and improve water quality and quantity.
- Research and resources provide growers techniques to reduce dust, including low dust harvesting equipment, which cuts dust emissions on average 50%.²
- The end of most ag waste burning by 2025 in the San Joaquin Valley is driving adoption of Whole Orchard Recycling.
- Growers can document on-farm practices through ABC's California Almond Stewardship Platform (CASP) self-assessment.

1. California Air Resources Board. An Inventory of Ecosystem Carbon in California's Natural and Working Lands. 2018 Edition (Updated 2020), p. 41. U.S. Environmental Protection Agency. Greenhouse Gas Equivalencies Calculator. July 2023.

2. El Jirre N. Baticados et al. Particulate matter emission factors using low-dust harvesters for almond nut-picking operations. Journal of the Air and Waste Management Association. 2019.

BIODIVERSITY AND POLLINATOR HEALTH

- ABC led the launch of the California Pollinator Coalition together with Pollinator Partnership and CDFA. It aims to expand pollinator habitat on working lands with 20+ organizations that represent most of California's working farmland.
- More than 170,000 acres of almond farms are Bee Friendly certified through Pollinator Partnership. This represents 86% of all Bee-Friendly certified farms in the U.S.. It requires growers to provide diverse forage and habitat and to practice IPM.¹
- The North American Pollinator Protection Campaign presented its Business for Bees Sustainability Award to ABC and the state's almond farmers.
- The almond industry continues to expand pollinator habitat and IPM practices, with funding recently awarded through NRCS's Regional Conservation Partnership Project (RCPP), USDA's Climate Smart Commodity Partnership, and CDFA's Pollinator Habitat program.
- Cover crops are important for soil quality, insect biodiversity and honeybee health. 40% of orchards – almost half a million acres – planted cover crops in 2021.²
- Beehives brought in to pollinate almonds consistently leave stronger than when they arrived.³
- ABC's Honey Bee Best Management Practices identify ways to protect the health of both honey bees and native pollinators during almond bloom and throughout the year.⁴

1. Pollinator Partnership.

2. CASP 2022.

3. Elina Niño, University of California. Davis and Ramesh Sagili, Department of Horticulture, Oregon State University.

4. James Tauber et al. Colony-Level Effects of Amygdalin on Honeybees and Their Microbes. Insects. 2020.

KEY ISSUES & FAST FACTS 2023

The California almond industry recognizes its role as a leader in California agriculture and global almond production, aiming to make life better by what we grow and how we grow. With more than 1.6 million acres statewide, the industry works hard to be sure that almonds play a significant role in the overall health and well-being of our communities, consumers, environment and economy.

California almonds are ...

- **The #1 U.S. specialty crop export.**
- **California's #1 ag export with a value of \$4.67 billion in 2022.**
- **California's fourth-largest commodity with a 2022 farm gate value of \$3.5 billion.**
- **Around 80% of global almond production.**
- **70% exported, shipped to more than 100 countries.**
- **Creating more than 110,000 California jobs and contributing \$9.2 billion to California GDP.**
- **90% family farms – nearly 70% farming 100 acres or less.**
- **The #1 nut in global new product introductions since 2007.**

For additional information on key issues impacting the California almond industry, please contact regulatoryissues@almondboard.com

INCENTIVES

- The “Incentive Opportunities” page at Almonds.com was updated to provide better and easier functionality for both growers and handler and huller/sheller facilities. Opportunities can now be sorted by focus area, eligibility and more.
- California and federal incentive programs support grower adoption of irrigation best practices.
- California’s greenhouse gas Cap-and-Trade funds are used to incentivize practices such as cover crops and pollinator hedgerows in the Healthy Soils Program, solar energy, and irrigation improvements in SWEEP.
- California’s 2023-2024 budget continues to fund climate smart ag programs, including \$50 million for the Healthy Soils Program.
- Numerous opportunities for incentive funds, marketing efforts and financial/credit guarantees are funded through Farm Bill programs.
- NRCS offers cost-share grants for certain Integrated Pest Management (IPM) practices, including mating disruption and orchard sanitation for navel orangeworm management.
- With the Inflation Reduction Act, NRCS will be investing approximately 50% more into conservation practices and initiatives, totaling more than \$100 million of program support and funding in California.
- Incentive funds through NRCS and local air districts assist almond growers in transitioning to low-dust harvesters, buying cleaner engine equipment and adopting Whole Orchard Recycling.

WATER USE

- 82% of almond orchards use efficient micro-irrigation, allowing precision irrigation based on tree/soil needs and weather conditions.¹
- The record-breaking precipitation of last winter demonstrated the importance of maximizing groundwater recharge to both improve supply and support implementation of the Sustainable Groundwater Management Act (SGMA).
- ABC’s Introduction to Groundwater Recharge guide is frequently cited as a model resource for growers seeking to do on-farm recharge.
- California ag largely relies on irrigation and ABC research (210 projects since 1982) has led to development and adoption of advanced irrigation technologies.
- The Almond Irrigation Improvement Continuum, based on ABC research and expert advice, is a mechanism for growers to improve water use efficiency.
- Almond farmers have reduced the amount of water used to grow each pound of almonds by 33% since the 1990s through the adoption of water saving technology such as drip irrigation and improved yields.²
- In 2018, the goal was set for an additional 20% reduction of water by 2025 and, as of 2022, three-quarters of that goal had already been achieved.³

1. California Almond Stewardship Program (CASP) 2022.
2. University of California, 2010. Food and Agriculture Organization of the United Nations, 2012. Almond Board of California, 1990-94, 2000-14.
3. CASP Almond Orchard 2025 Goals MidPoint, SureHarvest, November 2022.

2023 FARM BILL

- The Farm Bill is an omnibus, multi-year law that governs an array of agricultural and food programs. It provides an opportunity to comprehensively and periodically address agricultural and food issues.
- Farm Bills typically authorize programs for five years. The last Farm Bill was passed in 2018, and while the timing of passage is uncertain, a new Farm Bill is currently being developed.
- Among the programs or initiatives that impact the almond industry:
 - Crop Insurance, which is a safety net for approximately 967,000 almond acres.
 - The Tree Assistance Program, which provides financial assistance to qualifying orchardists and nursery tree growers to replant or rehabilitate eligible trees.
 - Adjusted Gross Income (AGI) levels, which prevent many growers from being able to participate in Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP) and other NRCS programs.
 - Market Access Program (MAP) and Foreign Market Development (FMD) programs that ABC uses to open new markets, address trade barriers and build demand.
- ABC is working closely with the Almond Alliance of California, ag coalitions and national organizations to prioritize issues, highlight concerns and seek solutions through new program initiatives.

PESTICIDE STRATEGY

- Successful pest management contributes to wholesome nuts as well as efficient use of water and other inputs.
- In 2023, ABC reviewed current pest management tools for regulatory and reputational risks, as well as the potential role of new technologies to reduce risk. A holistic strategy is being pursued that includes research, outreach to growers and handlers, and engagement on policy issues in conjunction with other collaborators.
- Since 1973, ABC pest management research has provided almond growers with science-based, IPM solutions for many pest problems.
- In 2023, ABC began funding research to assess the efficacy of biopesticides to evaluate and increase grower confidence in the efficacy of these non-chemical tools.
- Recent IPM solutions that were developed with ABC funding support include pheromone-based mating disruption for key insect pests, tools to use natural predators for controlling mites, and assessing the value of cover crops for weed management and soil health.
- In 2022, ABC was awarded a grant from the Department of Pesticide Regulation to promote adoption of navel orangeworm mating disruption among small growers.
- ABC is engaging with registrants, industry and government authorities to encourage a risk-based, harmonized approach to setting and evaluating global pesticide Maximum Residue Limits (MRLs). Strict MRLs in export markets can result in trade disruption.
- Market basket surveys in Europe and the U.S. show minimal pesticide residues associated with almonds and tree nuts and that they are well within established MRLs.

ZERO WASTE

- Almond orchards produce four crops: the nuts, shells, hulls and trees. Almond kernels represent about 25% of the total almond “fruit.” Water used to grow almonds also supports these other valuable coproducts without the need for added resources.
- Use of almond hulls, as dairy feed, saves 440 billion gallons of water each year that would otherwise have been used to grow feed.
- Whole Orchard Recycling is a renewable solution for trees at the end of their productive lives. It involves grinding up orchards and incorporating the woody biomass into the soil. ABC-funded research shows that over time, this practice increases yields, returns nutrients to the soil, increases water infiltration and storage,¹ and sequesters 2.4 tons of carbon per acre in the soil.²
- Since 2017, nearly half of almond growers replanting their orchards have used Whole Orchard Recycling,³ according to CASP self-assessment data.
- Almond hulls, shells and woody biomass can be reused in markets as diverse as soil amendments, food and cosmetic ingredients, pulp-based containers, low carbon biofuels and a variety of activated carbon and biochar products through pyrolysis or torrefaction.
- Efforts are underway to obtain GRAS status for almond hulls used for food applications such as adding fiber to bars, as a coffee substitute and more.
- Working with regional economic development efforts in the Central Valley, ABC is investing to grow the biomass-based circular economy.

1. 16-PREC3-Holtz. Almond Orchard Recycling. <https://orchardrecycling.ucdavis.edu/>
2. Alissa Kendall, et al. Lifecycle-based Assessment of Energy Use and Greenhouse Gas Emissions in Almond Production, Part 1: Analytical Framework and Baseline Results. Journal of Industrial Ecology, 2015.
3. CASP 2022.