

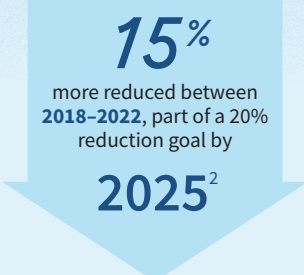
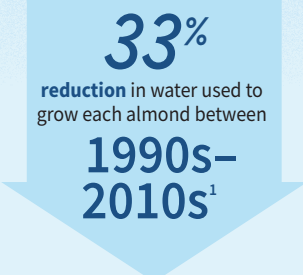


Everything you get with a handful of

# Almonds

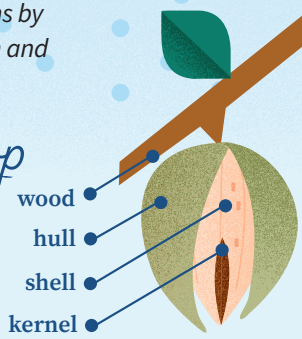
## Getting the most out of every drop

California almond farmers conserve water on their farms by adopting water-efficient technology like microirrigation and putting everything the orchard grows to good use.



## Four crops for every drop

Water used to grow almonds actually grows four products: the kernel you eat, which grows in a shell, protected by a hull, on a tree productive for approximately 25 years.



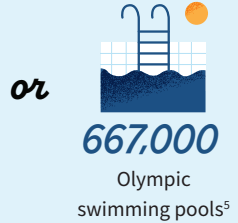
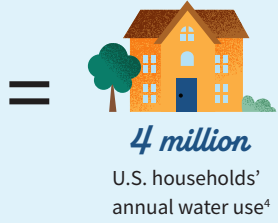
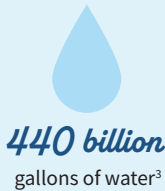
## Nothing goes to waste

Trees store carbon and are **transformed into electricity** or ground up into the soil at the end of their lives.



## Reducing the water needed to grow other feed crops

Hulls can replace alfalfa hay pound for pound in up to 20% of dairy feed formulations, reducing the acreage needed to grow it by 386,000 acres and **saving 440 billion gallons of water<sup>3</sup>**.



## Building biodiversity

Almond farmers are increasingly growing **cover crops**—important for soil quality, pest management and insect biodiversity.

## Growing more than almonds



**86%**

of all U.S. **bee-friendly certified farms** are almond farms.<sup>14</sup>



**42%**

of California almond orchards (685K acres) **maintain cover crops** between tree rows.<sup>11</sup>

## Helping honey bees



Bees get their first food of the year in almond orchards as they collect nutritious pollen<sup>15</sup> and nectar.<sup>16</sup> Beekeepers report their **hives consistently leave stronger** than when they arrived.<sup>17</sup>

## Environmentally friendly pest management

California almond farmers are on track for a **25% increase** in environmentally friendly pest management practices by 2025.<sup>2</sup>



## No food waste here

America throws away nearly 60 million tons of food every year—that's almost **40% of the entire U.S. food supply**.<sup>19</sup> Less than 1% of almonds are thrown out thanks to their **two-year shelf life**.<sup>20</sup>



Almonds are a shelf-stable food which means they are **shipped around the world by boat**. Cargo ships produce **50x less CO<sub>2</sub> per kilometer** than travel by plane.<sup>21</sup>

## Why California?

### Family farms

There are 7,600 almond farmers in California: **90% are family farms**, and 70% of orchards are 100 acres or less.<sup>22</sup>



### Ideal climate

California is **1 of only 5 Mediterranean climates** on Earth, essential to growing almonds.

### High standards

California's growing environment is one of the **most regulated globally**, with strict laws protecting the environment, worker and food safety.

# Climate smart farming

Almond trees capture and store carbon dioxide, a greenhouse gas, in their wood and roots. This storage accumulates as the trees grow, reducing emissions and environmental impact.

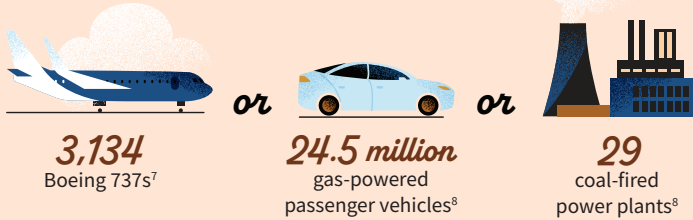
## Almond trees store a lot of carbon

Compared to other fruit and nut trees grown in California, almonds store one of the **highest amounts of carbon per acre**—18 metric tons annually. When you look at carbon stored in all of California's almond trees (1.63 million acres), this nets out to 30 million metric tons.<sup>6</sup>



**30 million**  
metric tons of carbon<sup>6</sup>

Equivalent to the annual emissions of:



## Whole orchard recycling

Farms that recycle their orchards capture 2.4 tons of carbon per acre,<sup>9</sup> each one **equal to living car-free for a year.**<sup>10</sup>

### 25-year lifespan

Almond orchards are a **no-till environment** for their 25-year lifespan.



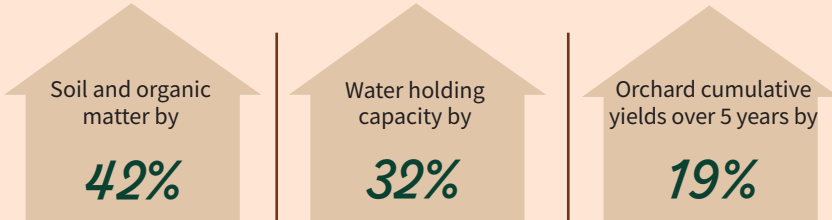
### Back to the soil

At the end of their productive lives, whole trees are ground up and incorporated back into the soil, extending their sequestration.

### On-farm adoption

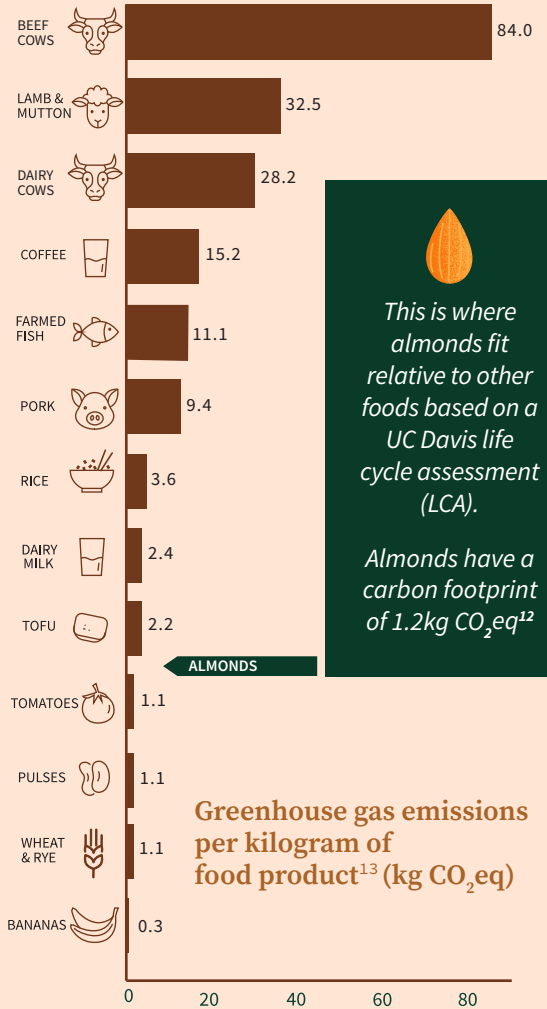
Since this practice was **introduced in 2017**, nearly half of almond farmers replanting orchards have used this approach.<sup>11</sup>

Whole orchard recycling helps farmers too, increasing:<sup>9</sup>



## A low carbon footprint

Almonds have a lower carbon footprint than many other foods.

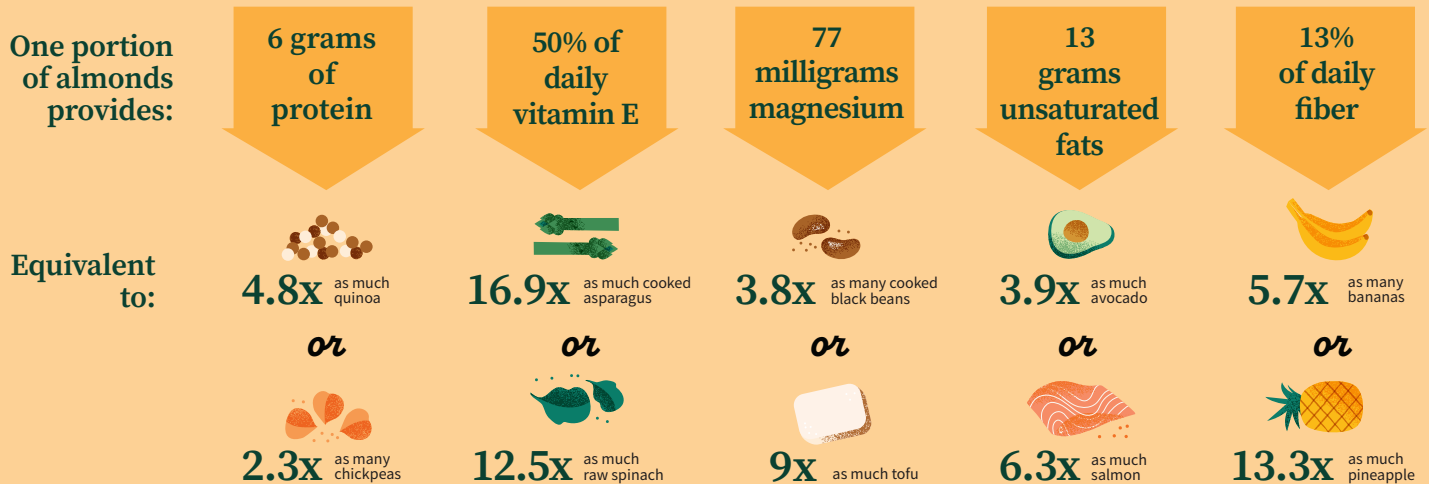


This is where almonds fit relative to other foods based on a UC Davis life cycle assessment (LCA).  
Almonds have a carbon footprint of 1.2kg CO<sub>2</sub>e/kg<sup>12</sup>

Greenhouse gas emissions per kilogram of food product<sup>13</sup> (kg CO<sub>2</sub>e/kg)

## Health and nutrition

Ounce for ounce, almonds are the tree nut highest in protein, fiber, calcium, vitamin E, riboflavin and niacin<sup>18</sup> and may be a more efficient way to consume certain nutrients.



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