



Metal Accumulation Calculator (MAC)

Feedstock Type

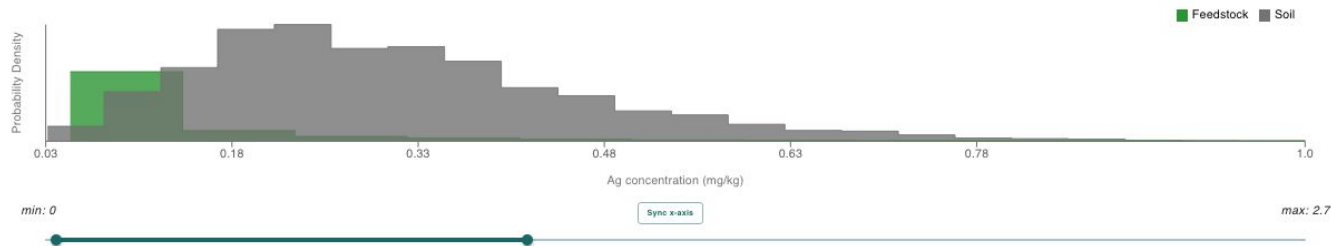
Basalt

Element

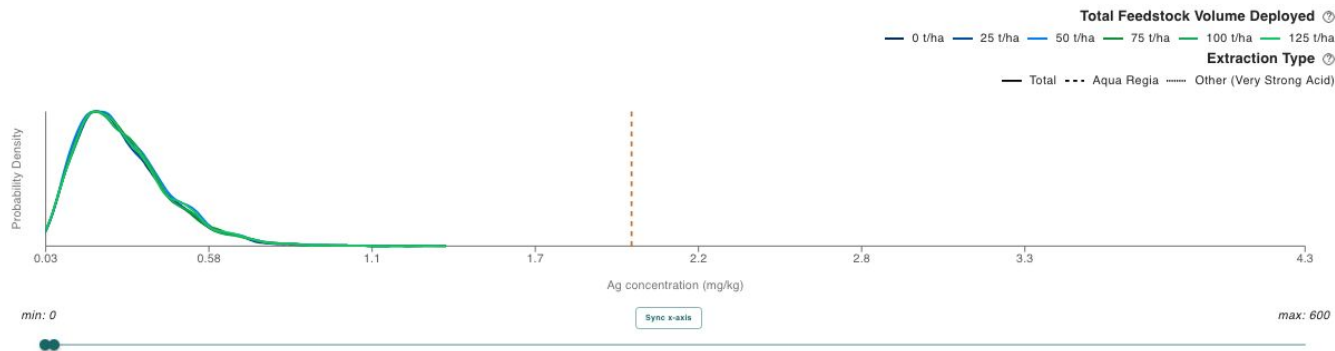
Ag

CALCULATE

Feedstock and soil Ag distributions



Soil Ag after basalt application



Regulations

--- Lithuania, agricultural soils (2 mg/kg) --- EPA, plants (560 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

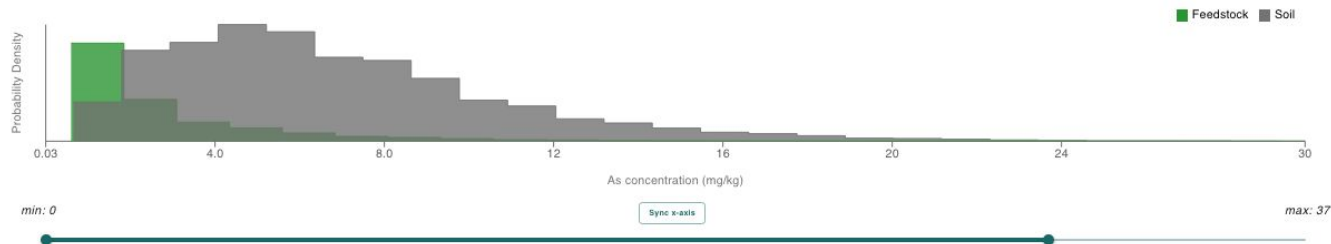
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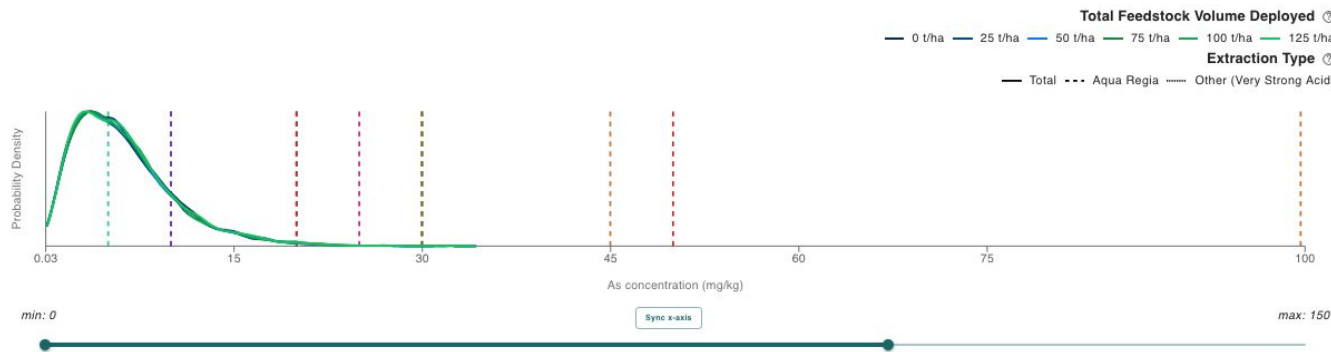
As

CALCULATE

Feedstock and soil As distributions



Soil As after basalt application



Regulations

- Finland, threshold value (5 mg/kg)
- Lithuania, agricultural soils (10 mg/kg)
- Slovakia, agricultural soils, sand (10 mg/kg)
- Australia (20 mg/kg)
- Austria, agricultural soils (20 mg/kg)
- Slovakia, agricultural soils, loam (25 mg/kg)
- Czech Republic, agricultural light soils (30 mg/kg)
- Czech Republic, agricultural other soils (30 mg/kg)
- Slovakia, agricultural soils, clay (30 mg/kg)
- Belgium (45 mg/kg)
- Finland, ecological risks (50 mg/kg)
- Finland, health risks (100 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

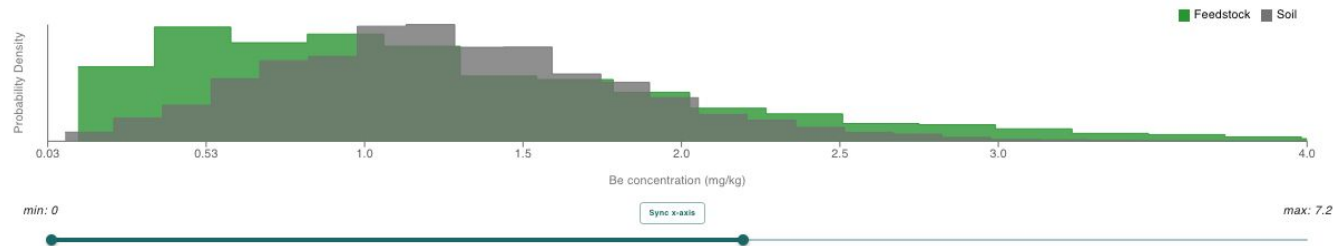
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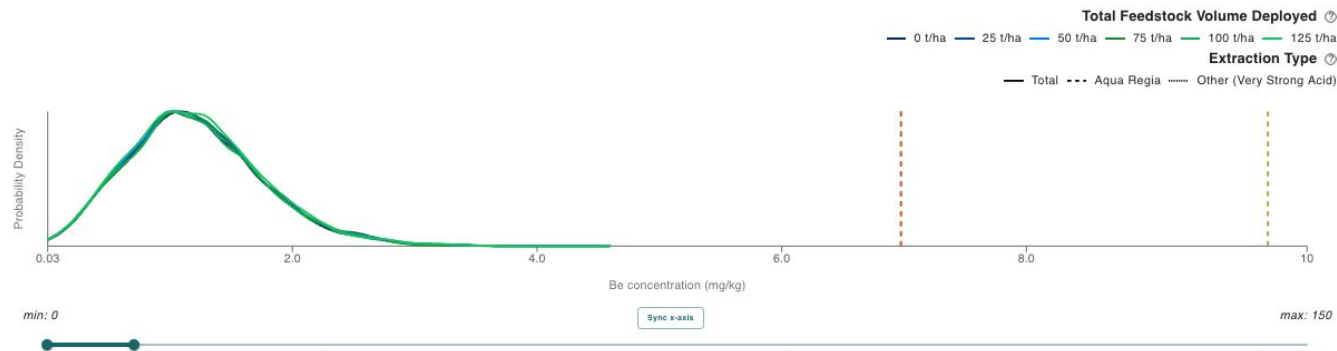
Be

CALCULATE

Feedstock and soil Be distributions



Soil Be after basalt application



Regulations

--- Czech Republic, agricultural light soils (7 mg/kg) --- Czech Republic, agricultural other soils (7 mg/kg) --- Lithuania, agricultural soils (10 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

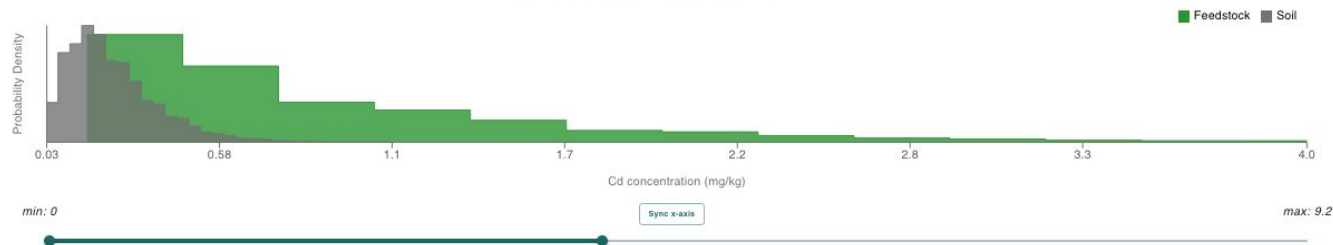
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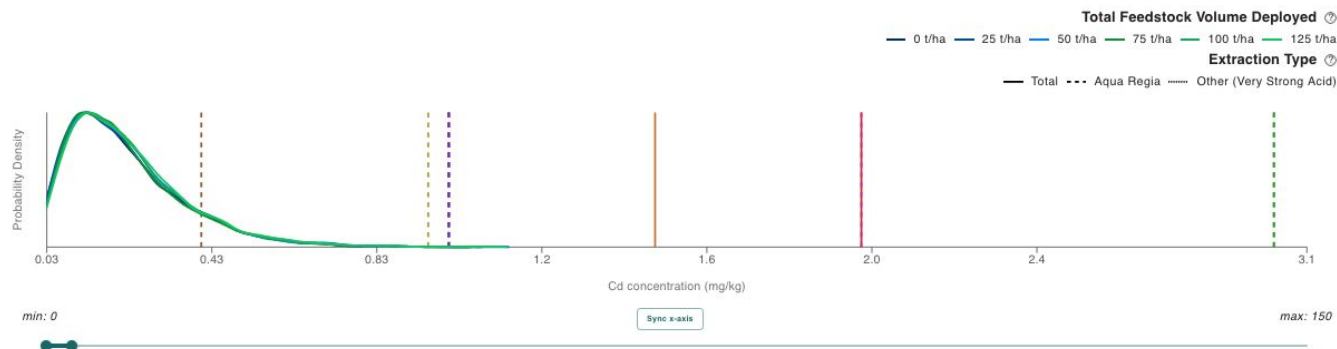
Cd

CALCULATE

Feedstock and soil Cd distributions



Soil Cd after basalt application



Regulations

- Czech Republic, agricultural light soils (0.4 mg/kg) --- Germany (0.95 mg/kg) --- Czech Republic, agricultural other soils (1 mg/kg) --- Portugal, soil pH <5.5 (1 mg/kg) --- Finland, threshold value (1 mg/kg)
- Austria, agricultural soils (1 mg/kg) --- Italy (1.5 mg/kg) --- France (2 mg/kg) --- Belgium (2 mg/kg) --- Lithuania, agricultural soils (3 mg/kg) --- Portugal, soil pH 5.5 - 7 (3 mg/kg) --- Australia (3 mg/kg)
- Portugal, soil pH >7 (4 mg/kg) --- Finland, ecological risks (10 mg/kg) --- Finland, health risks (20 mg/kg) --- EPA, plants (32 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

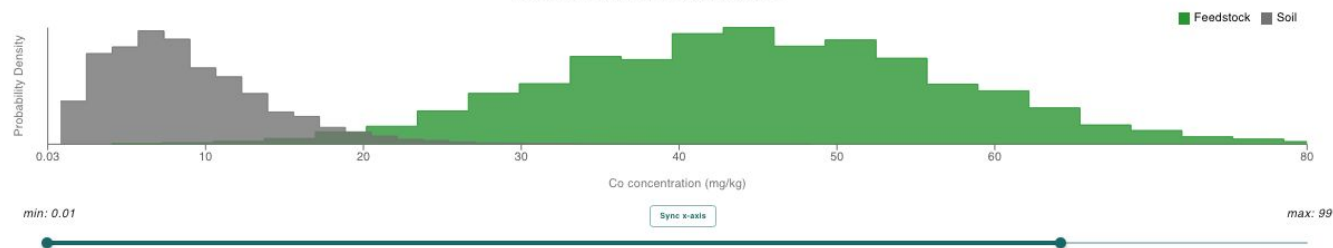
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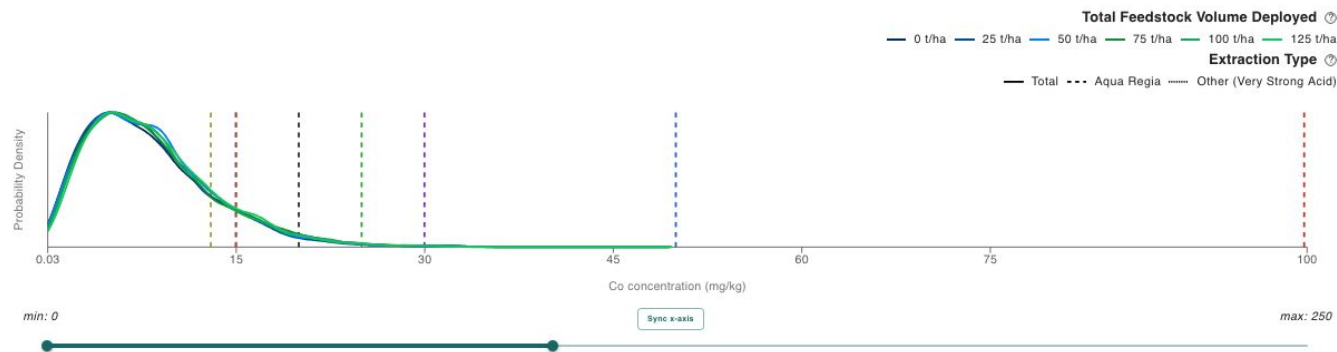
Co

CALCULATE

Feedstock and soil Co distributions



Soil Co after basalt application



Regulations

- EPA, plants (13 mg/kg)
- Slovakia, agricultural soils, sand (15 mg/kg)
- Slovakia, agricultural soils, loam (15 mg/kg)
- Slovakia, agricultural soils, clay (20 mg/kg)
- Czech Republic, agricultural light soils (25 mg/kg)
- Lithuania, agricultural soils (30 mg/kg)
- Czech Republic, agricultural other soils (50 mg/kg)
- Finland, ecological risks (100 mg/kg)
- Finland, health risks (250 mg/kg)



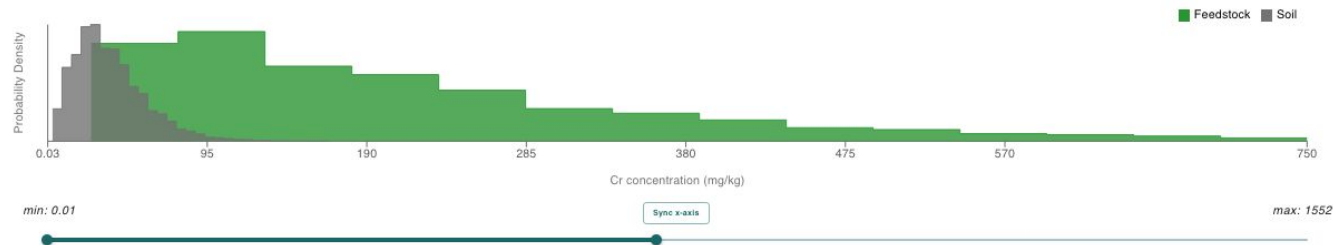
Metal Accumulation Calculator (MAC)

Feedstock Type

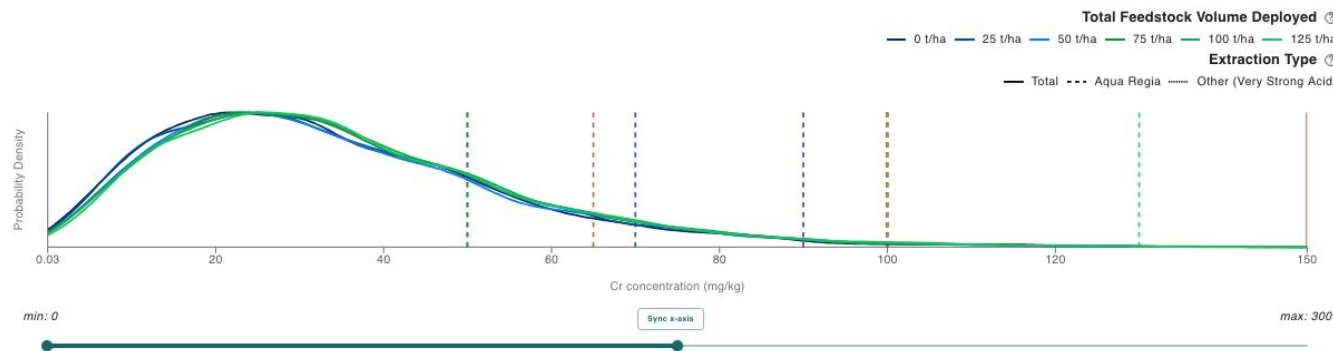
Element

CALCULATE

Feedstock and soil Cr distributions



Soil Cr after basalt application



Regulations

- Portugal, soil pH <5.5 (50 mg/kg)
- Slovakia, agricultural soils, sand (50 mg/kg)
- Germany (65 mg/kg)
- Slovakia, agricultural soils, loam (70 mg/kg)
- Slovakia, agricultural soils, clay (90 mg/kg)
- Finland, threshold value (100 mg/kg)
- Austria, agricultural soils (100 mg/kg)
- Czech Republic, agricultural light soils (100 mg/kg)
- Lithuania, agricultural soils (100 mg/kg)
- Belgium (130 mg/kg)
- France (150 mg/kg)
- Finland, ecological risks (200 mg/kg)
- Portugal, soil pH 5.5 - 7 (200 mg/kg)
- Czech Republic, agricultural other soils (200 mg/kg)
- Finland, health risks (300 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

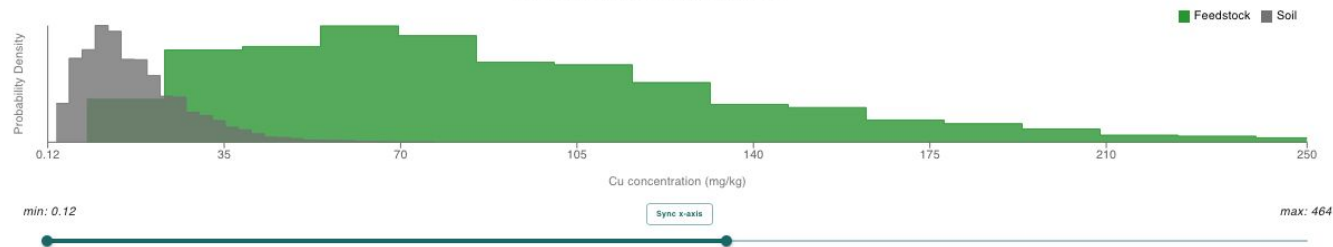
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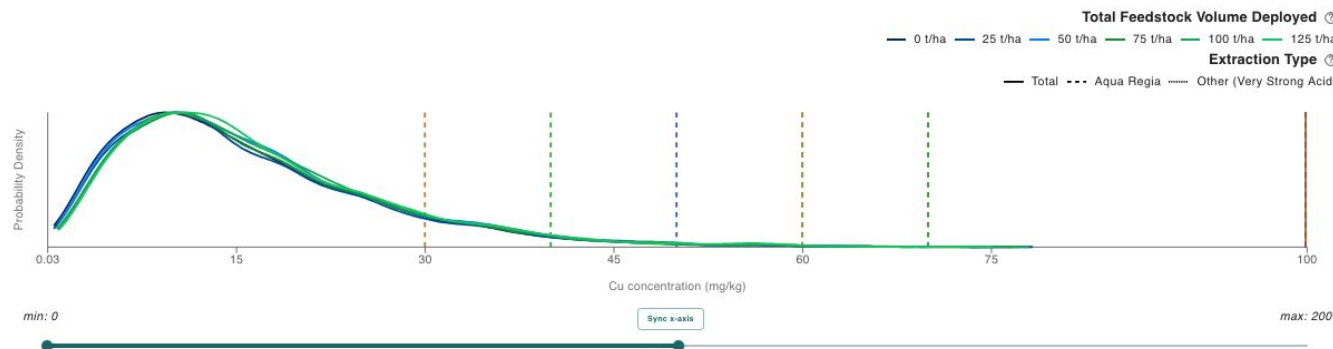
Cu

CALCULATE

Feedstock and soil Cu distributions



Soil Cu after basalt application



Regulations

--- Slovakia, agricultural soils, sand (30 mg/kg) --- Germany (40 mg/kg) --- Portugal, soil pH <5.5 (50 mg/kg) --- Czech Republic, agricultural light soils (60 mg/kg) --- Slovakia, agricultural soils, loam (60 mg/kg)

--- EPA, plants (70 mg/kg) --- Slovakia, agricultural soils, clay (70 mg/kg) --- France (100 mg/kg) --- Italy (100 mg/kg) --- Austria, agricultural soils (100 mg/kg)

--- Czech Republic, agricultural other soils (100 mg/kg) --- Lithuania, agricultural soils (100 mg/kg) --- Portugal, soil pH 5.5 - 7 (100 mg/kg) --- Australia (100 mg/kg) --- Finland, ecological risks (150 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

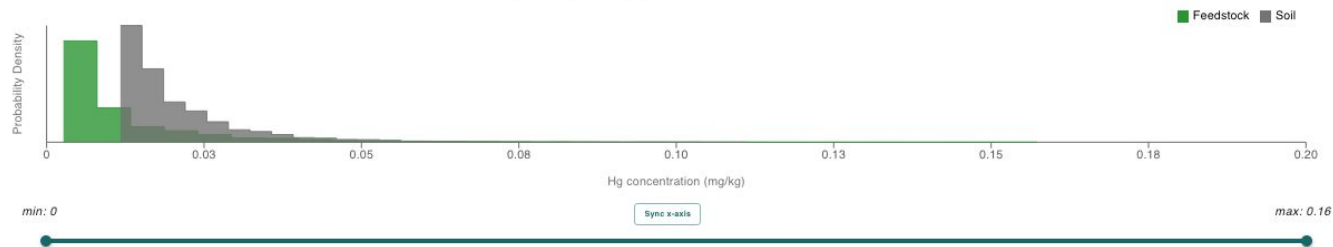
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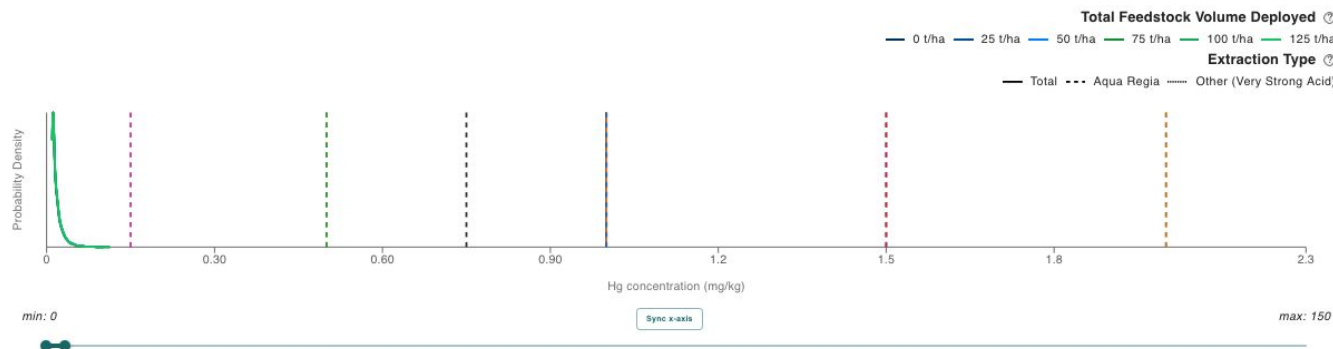
Hg

CALCULATE

Feedstock and soil Hg distributions



Soil Hg after basalt application



Regulations

--- Slovakia, agricultural soils, sand (0.15 mg/kg) --- Slovakia, agricultural soils, loam (0.5 mg/kg) --- Finland, threshold value (0.5 mg/kg) --- Slovakia, agricultural soils, clay (0.75 mg/kg) --- France (1 mg/kg)

--- Italy (1 mg/kg) --- Portugal, soil pH <5.5 (1 mg/kg) --- Australia (1 mg/kg) --- Austria, agricultural soils (1 mg/kg) --- Lithuania, agricultural soils (1.5 mg/kg) --- Portugal, soil pH 5.5 - 7 (1.5 mg/kg)

--- Finland, ecological risks (2 mg/kg) --- Portugal, soil pH >7 (2 mg/kg) --- Finland, health risks (5 mg/kg) --- Belgium (10 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

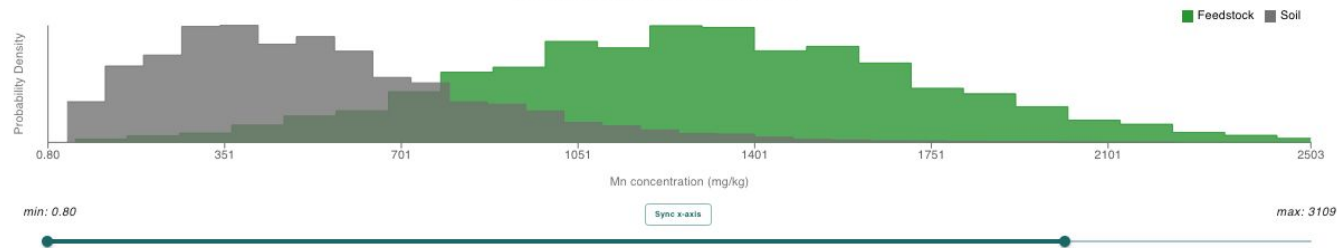
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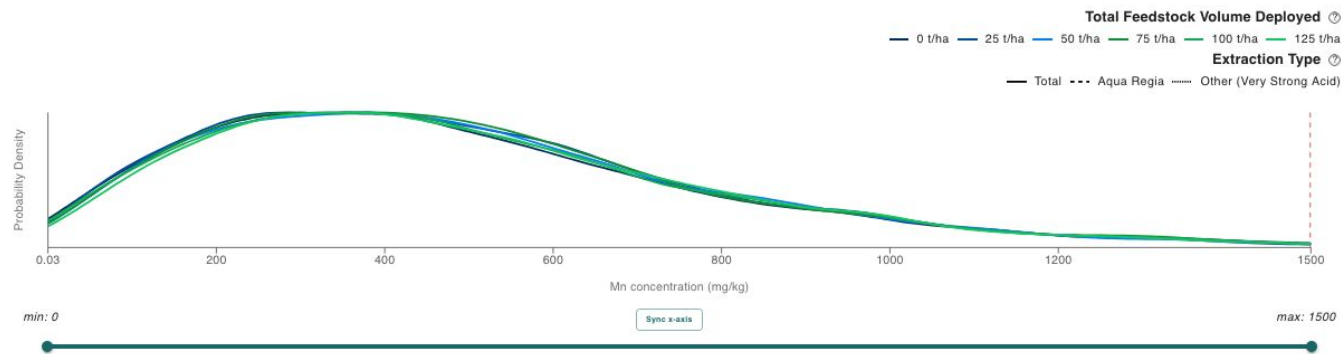
Mn

CALCULATE

Feedstock and soil Mn distributions



Soil Mn after basalt application





Metal Accumulation Calculator (MAC)

Feedstock Type

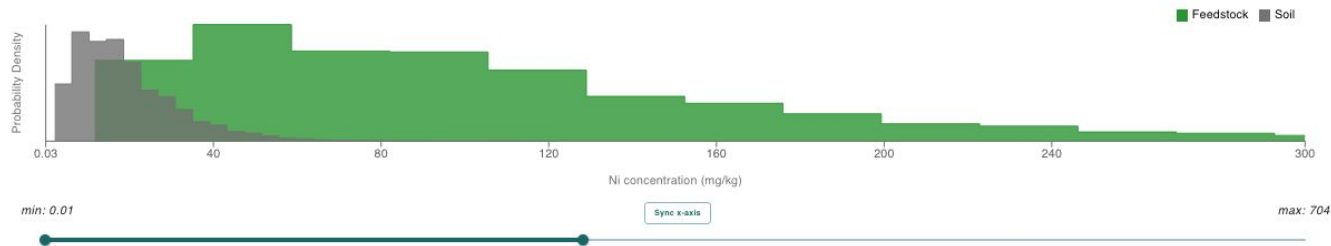
Basalt

Element

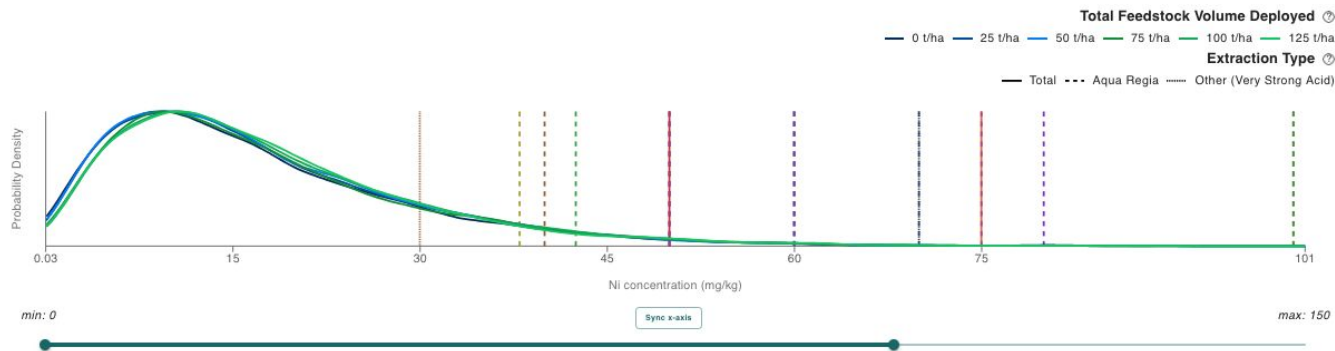
Ni

CALCULATE

Feedstock and soil Ni distributions



Soil Ni after basalt application



Regulations

----- Brazil, prevention value (30 mg/kg) ----- EPA, plants (38 mg/kg) ----- Slovakia, agricultural soils, sand (40 mg/kg) ----- Germany (42.5 mg/kg) ----- France (50 mg/kg) ----- Slovakia, agricultural soils, loam (50 mg/kg)

----- Finland, threshold value (50 mg/kg) ----- Czech Republic, agricultural light soils (60 mg/kg) ----- Slovakia, agricultural soils, clay (60 mg/kg) ----- Austria, agricultural soils (60 mg/kg) ----- Australia (60 mg/kg)

----- Portugal (70 mg/kg) ----- Brazil, threshold value (70 mg/kg) ----- Italy (75 mg/kg) ----- Lithuania, agricultural soils (75 mg/kg) ----- Czech Republic, agricultural other soils (80 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

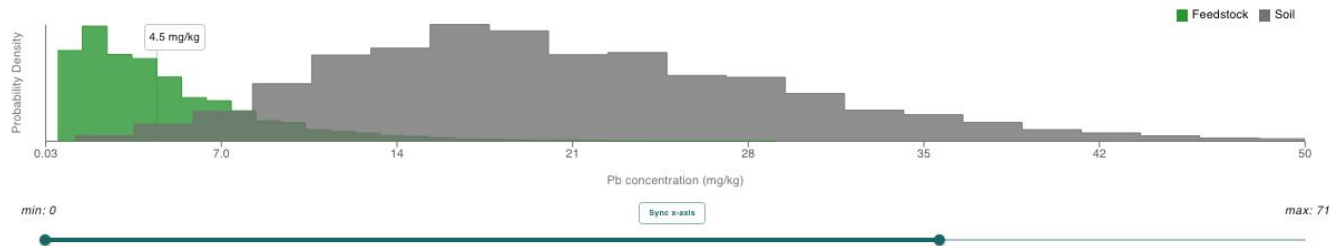
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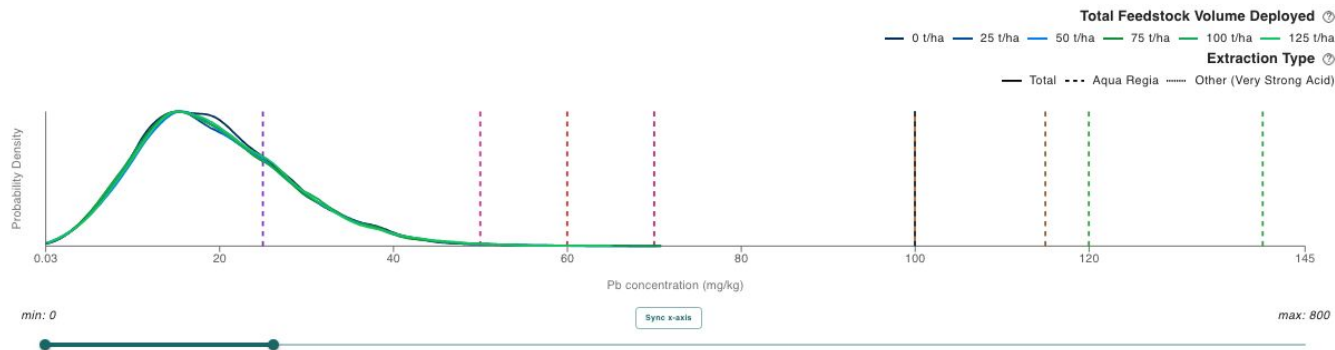
Pb

CALCULATE

Feedstock and soil Pb distributions



Soil Pb after basalt application



Regulations

--- Slovakia, agricultural soils, sand (25 mg/kg) --- Portugal, soil pH <5.5 (50 mg/kg) --- Finland, threshold value (60 mg/kg) --- Germany (70 mg/kg) --- Slovakia, agricultural soils, loam (70 mg/kg)

--- France (100 mg/kg) --- Italy (100 mg/kg) --- Czech Republic, agricultural light soils (100 mg/kg) --- Lithuania, agricultural soils (100 mg/kg) --- Austria, agricultural soils (100 mg/kg)

--- Slovakia, agricultural soils, clay (115 mg/kg) --- EPA, plants (120 mg/kg) --- Czech Republic, agricultural other soils (140 mg/kg) --- Finland, ecological risks (200 mg/kg) --- Belgium (200 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

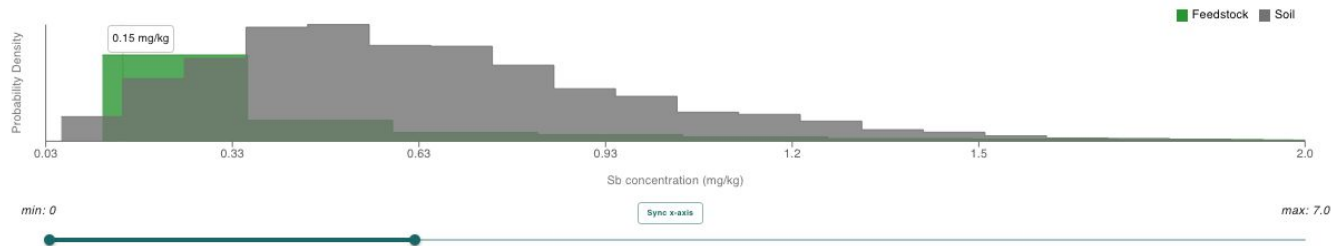
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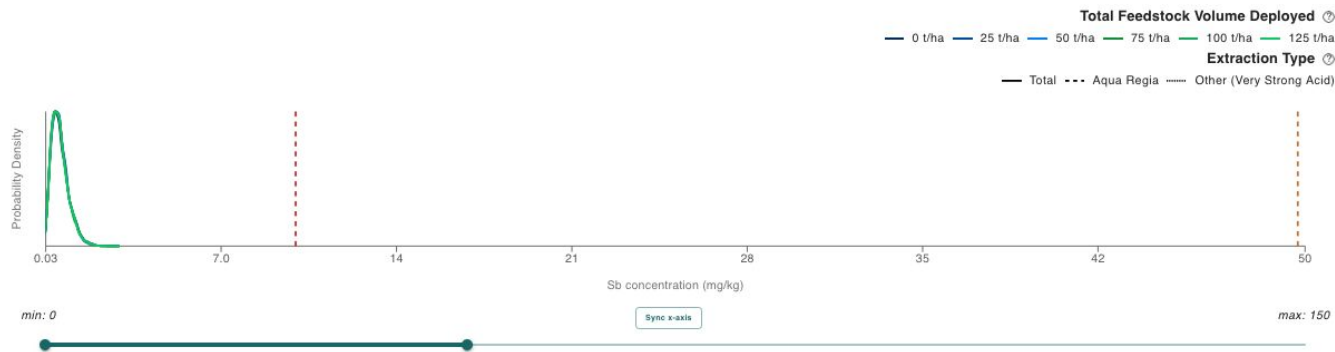
Sb

CALCULATE

Feedstock and soil Sb distributions



Soil Sb after basalt application



Regulations

--- Finland, ecological risks (10 mg/kg) --- Finland, health risks (50 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

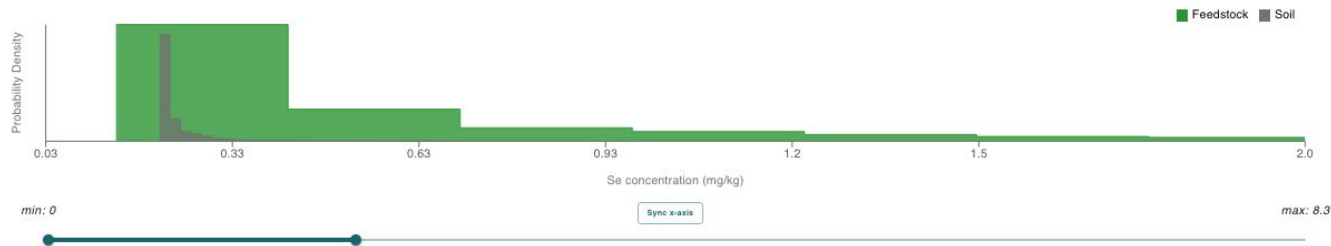
Basalt

Element

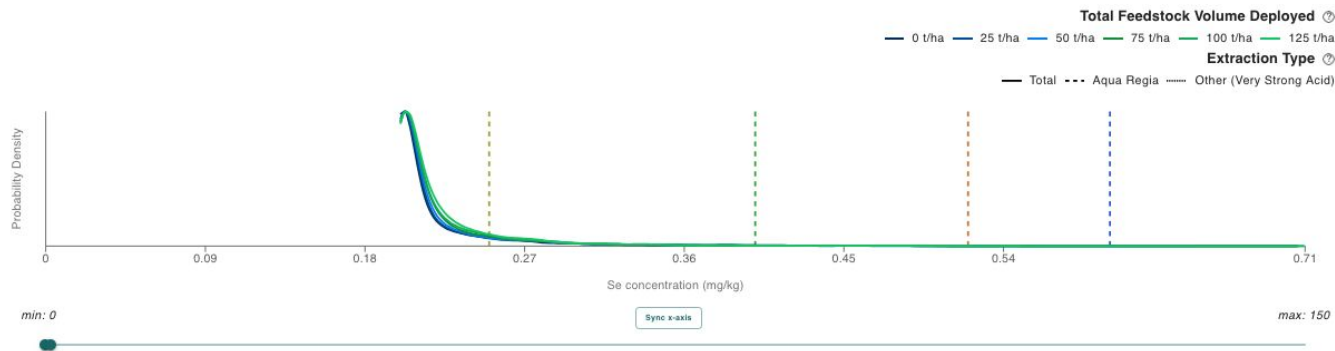
Se

CALCULATE

Feedstock and soil Se distributions



Soil Se after basalt application



Regulations

--- Slovakia, agricultural soils, sand (0.25 mg/kg) --- Slovakia, agricultural soils, loam (0.4 mg/kg) --- EPA, plants (0.52 mg/kg) --- Slovakia, agricultural soils, clay (0.6 mg/kg) --- Lithuania, agricultural soils (5 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

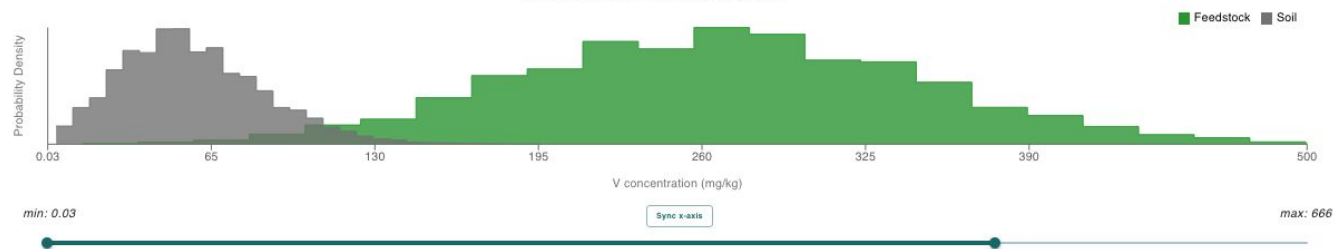
Basalt

Element

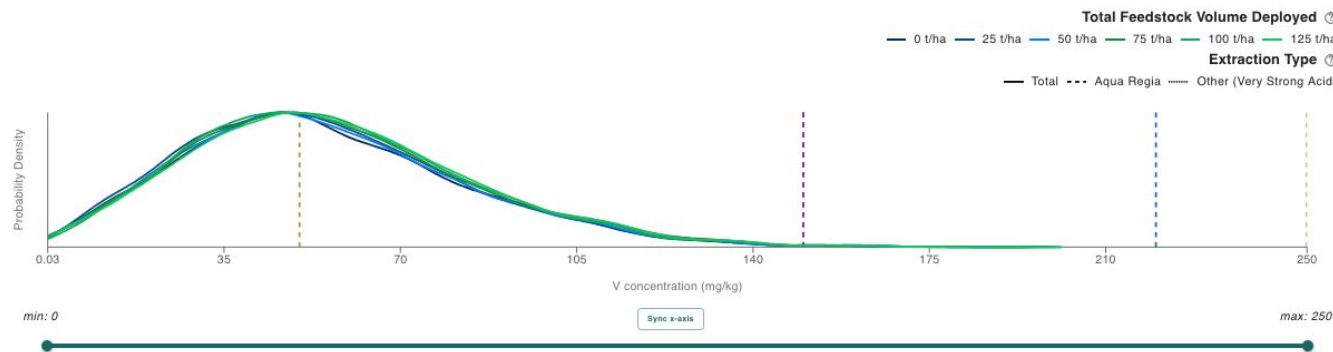
V

CALCULATE

Feedstock and soil V distributions



Soil V after basalt application



Regulations

- Austria, agricultural soils (50 mg/kg)
- Finland, ecological risks (150 mg/kg)
- Czech Republic, agricultural light soils (150 mg/kg)
- Lithuania, agricultural soils (150 mg/kg)
- Czech Republic, agricultural other soils (220 mg/kg)
- Finland, health risks (250 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

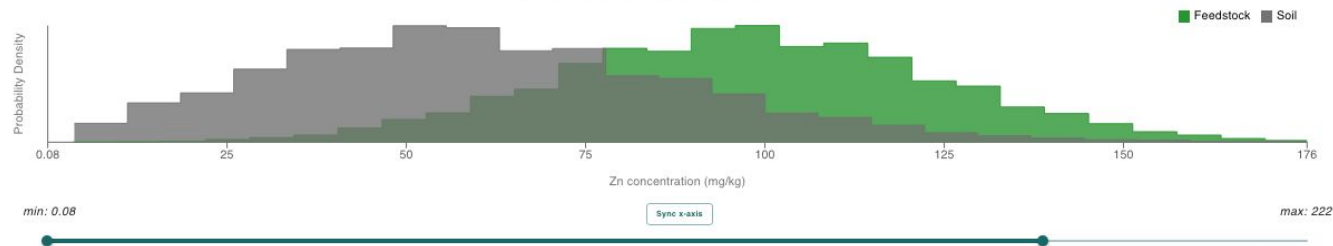
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Element

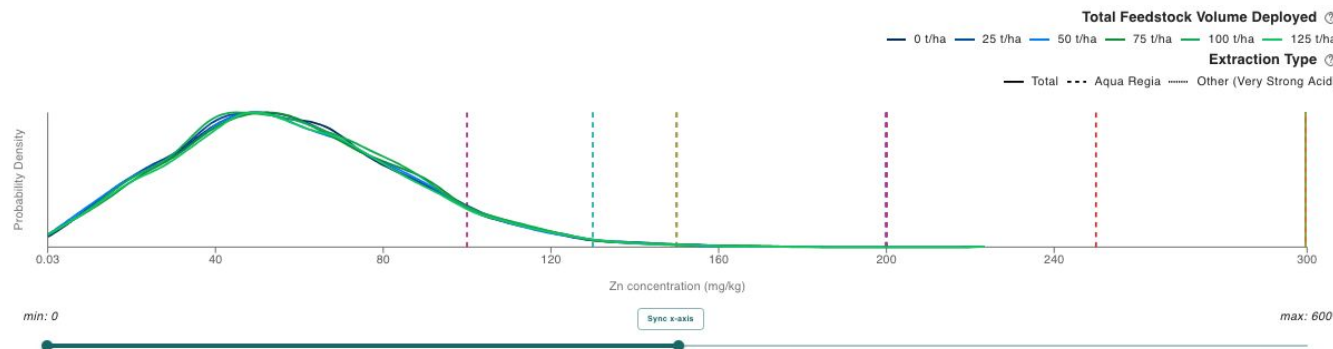
Zn

CALCULATE

Feedstock and soil Zn distributions



Soil Zn after basalt application



Regulations

- Slovakia, agricultural soils, sand (100 mg/kg) --- Czech Republic, agricultural light soils (130 mg/kg) --- Germany (130 mg/kg) --- Slovakia, agricultural soils, loam (150 mg/kg)
- Portugal, soil pH <5.5 (150 mg/kg) --- Czech Republic, agricultural other soils (200 mg/kg) --- Slovakia, agricultural soils, clay (200 mg/kg) --- Australia (200 mg/kg) --- Finland, threshold value (200 mg/kg)
- Finland, ecological risks (250 mg/kg) --- France (300 mg/kg) --- Italy (300 mg/kg) --- Austria, agricultural soils (300 mg/kg) --- Portugal, soil pH 5.5 - 7 (300 mg/kg) --- Austria, agricultural soils (300 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

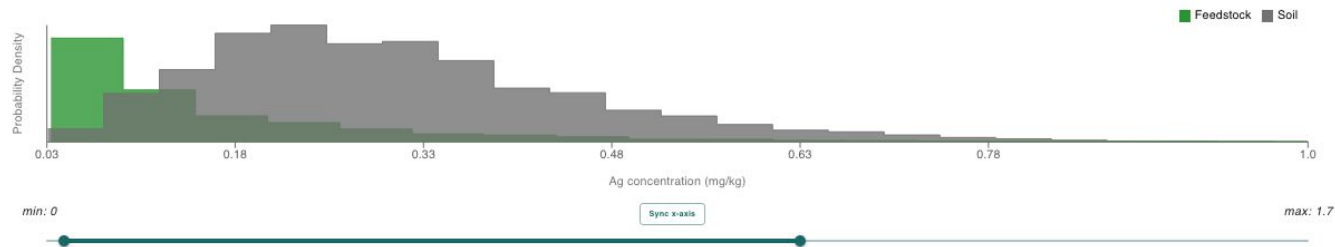
Peridotite

Element

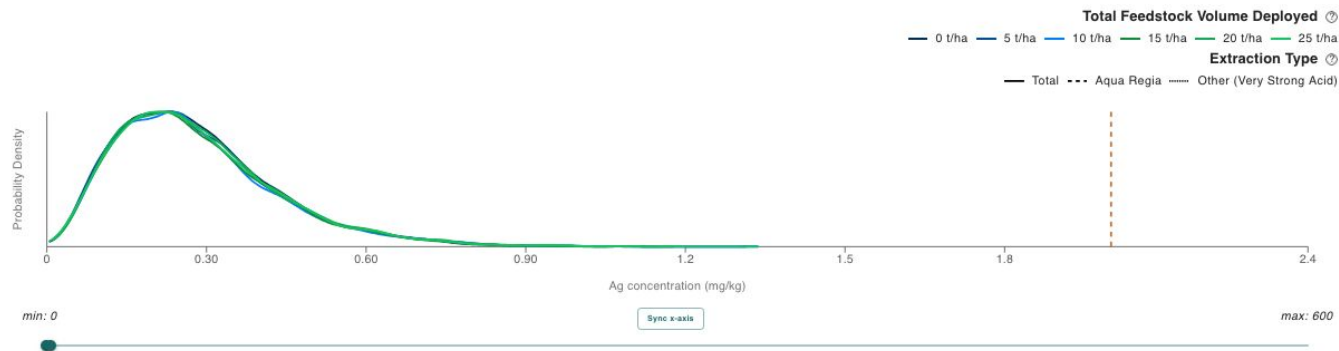
Ag

CALCULATE

Feedstock and soil Ag distributions



Soil Ag after peridotite application



Regulations

--- Lithuania, agricultural soils (2 mg/kg) --- EPA, plants (560 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

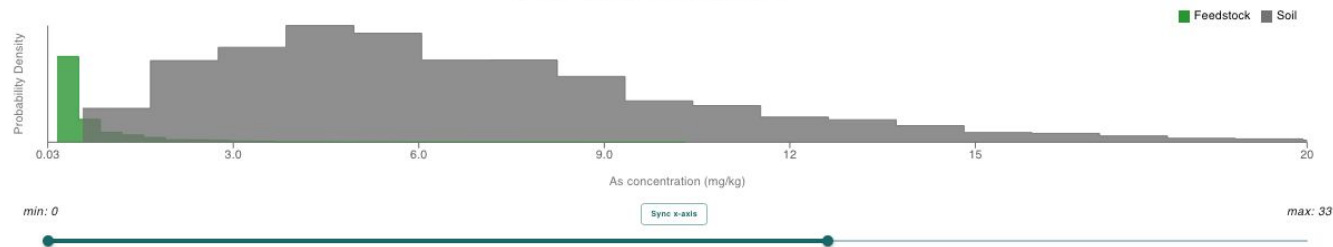
Peridotite

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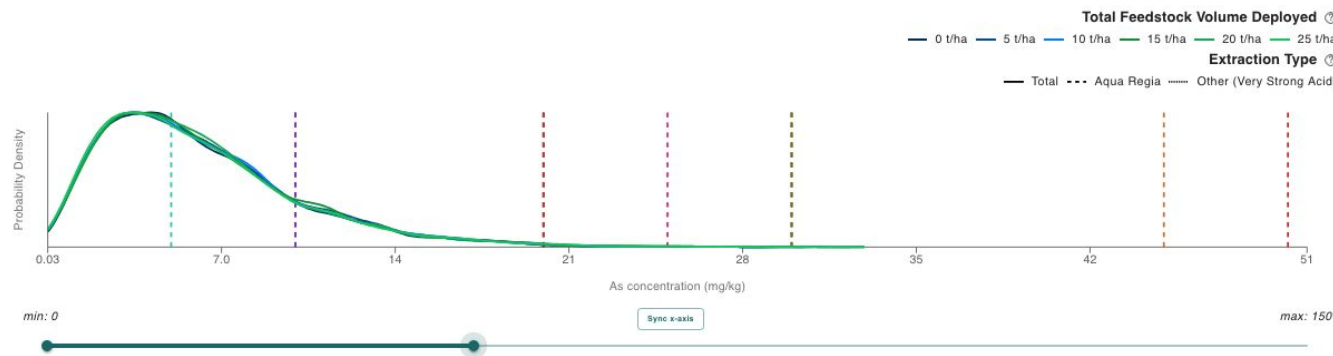
As

CALCULATE

Feedstock and soil As distributions



Soil As after peridotite application



Regulations

- Finland, threshold value (5 mg/kg)
- Lithuania, agricultural soils (10 mg/kg)
- Slovakia, agricultural soils, sand (10 mg/kg)
- Australia (20 mg/kg)
- Austria, agricultural soils (20 mg/kg)
- Slovakia, agricultural soils, loam (25 mg/kg)
- Czech Republic, agricultural light soils (30 mg/kg)
- Czech Republic, agricultural other soils (30 mg/kg)
- Slovakia, agricultural soils, clay (30 mg/kg)
- Belgium (45 mg/kg)
- Finland, ecological risks (50 mg/kg)
- Finland, health risks (100 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

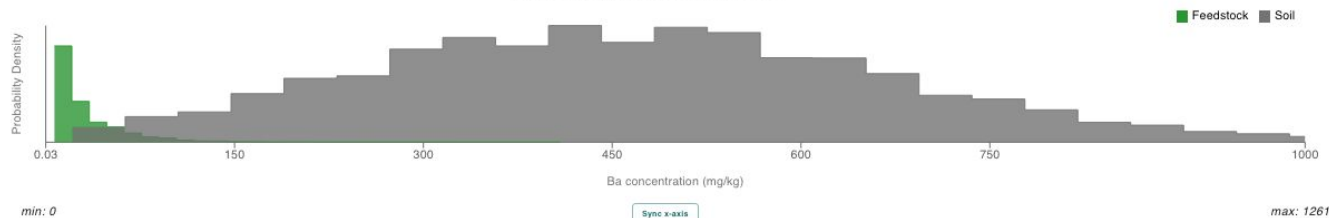
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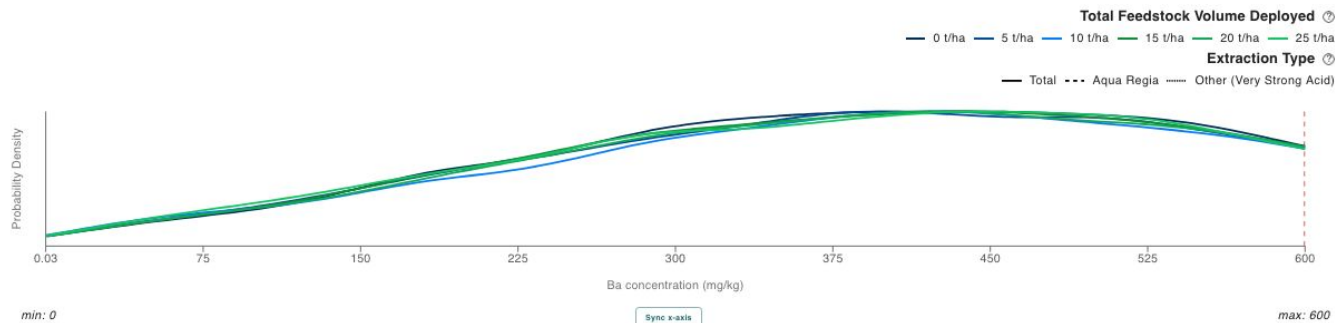
Ba

CALCULATE

Feedstock and soil Ba distributions



Soil Ba after peridotite application



Regulations

--- Lithuania, agricultural soils (600 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

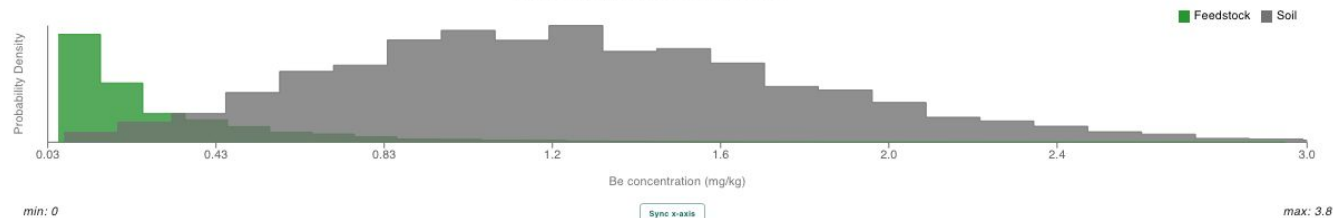
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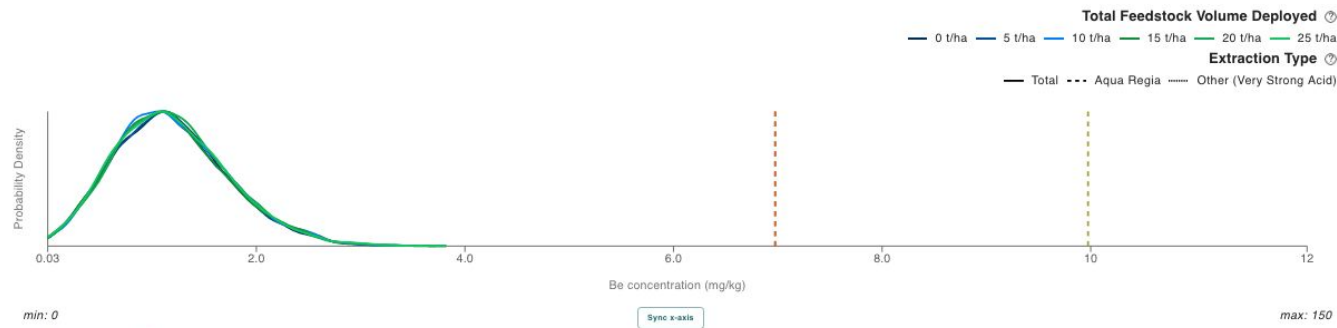
Be

CALCULATE

Feedstock and soil Be distributions



Soil Be after peridotite application



Regulations

--- Czech Republic, agricultural light soils (7 mg/kg) --- Czech Republic, agricultural other soils (7 mg/kg) --- Lithuania, agricultural soils (10 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

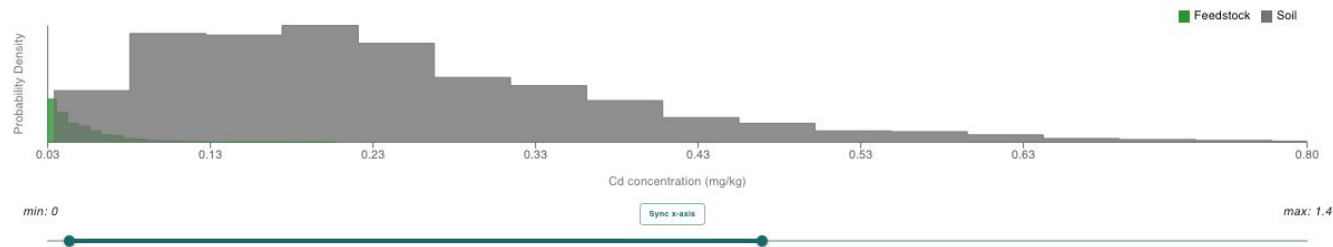
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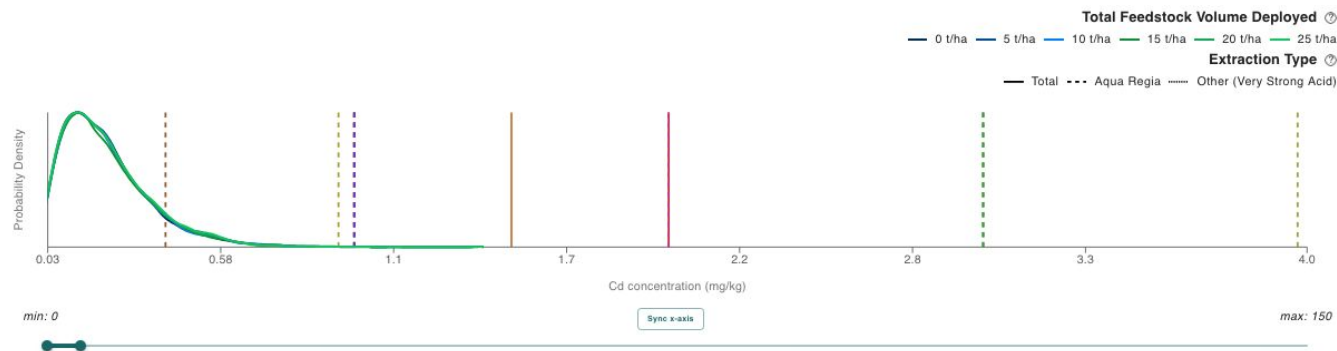
Cd

CALCULATE

Feedstock and soil Cd distributions



Soil Cd after peridotite application



Regulations

- Czech Republic, agricultural light soils (0.4 mg/kg) --- Germany (0.95 mg/kg) --- Czech Republic, agricultural other soils (1 mg/kg) --- Portugal, soil pH <5.5 (1 mg/kg) --- Finland, threshold value (1 mg/kg)
- Austria, agricultural soils (1 mg/kg) --- Italy (1.5 mg/kg) --- France (2 mg/kg) --- Belgium (2 mg/kg) --- Lithuania, agricultural soils (3 mg/kg) --- Portugal, soil pH 5.5 - 7 (3 mg/kg) --- Australia (3 mg/kg)
- Portugal, soil pH >7 (4 mg/kg) --- Finland, ecological risks (10 mg/kg) --- Finland, health risks (20 mg/kg) --- EPA, plants (32 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

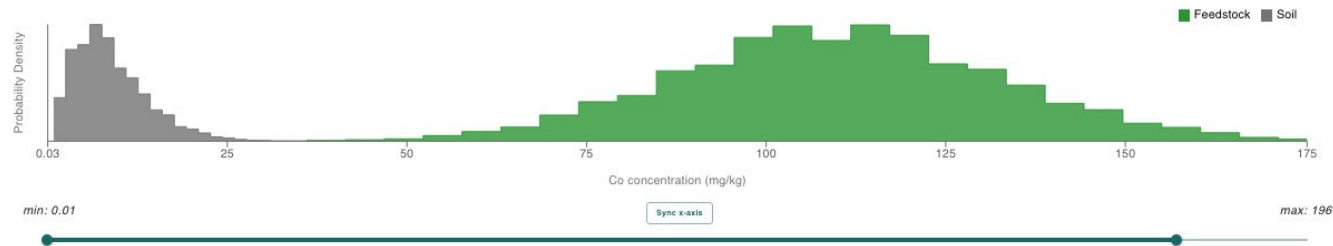
Peridotite

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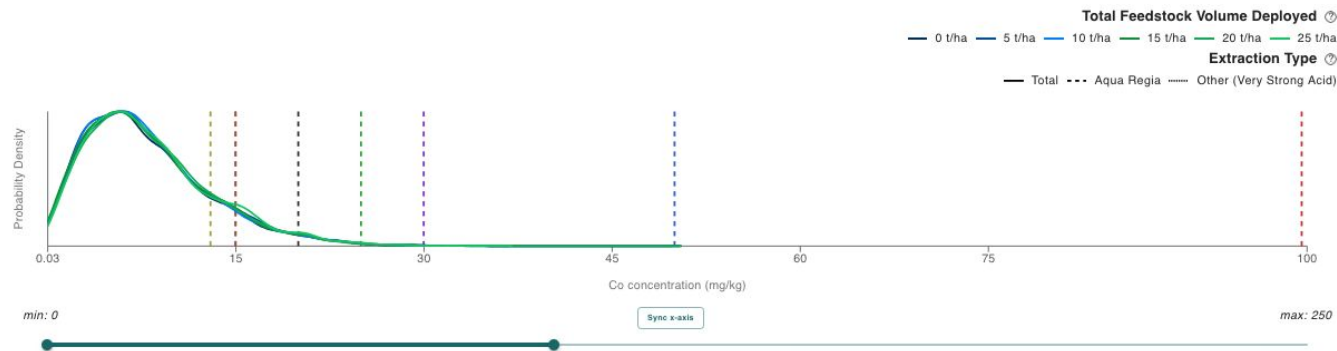
Co

CALCULATE

Feedstock and soil Co distributions



Soil Co after peridotite application



Regulations

- EPA, plants (13 mg/kg) --- Slovakia, agricultural soils, sand (15 mg/kg) --- Slovakia, agricultural soils, loam (15 mg/kg) --- Slovakia, agricultural soils, clay (20 mg/kg)
- Czech Republic, agricultural light soils (25 mg/kg) --- Lithuania, agricultural soils (30 mg/kg) --- Czech Republic, agricultural other soils (50 mg/kg) --- Finland, ecological risks (100 mg/kg)
- Finland, health risks (250 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

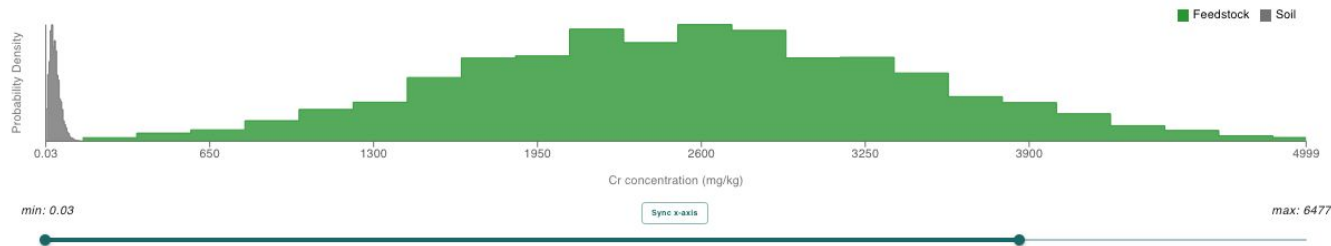
Peridotite

Element

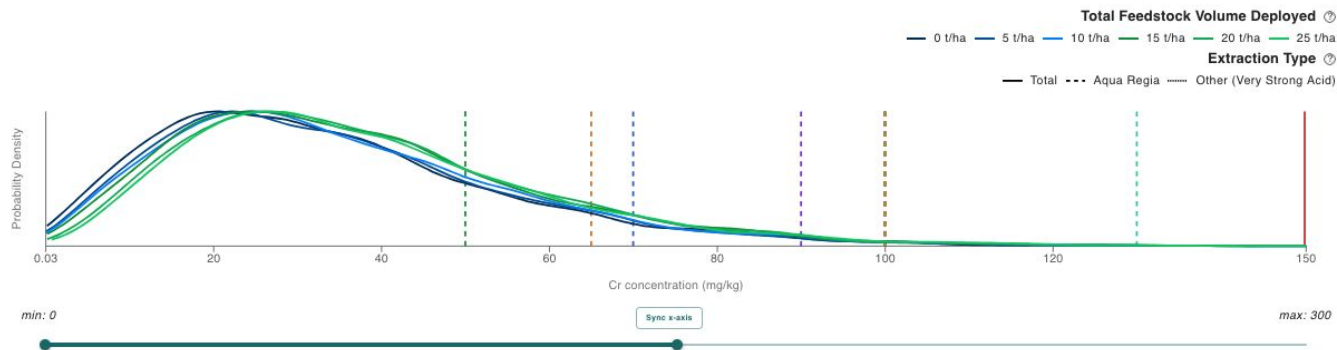
Cr

CALCULATE

Feedstock and soil Cr distributions



Soil Cr after peridotite application



Regulations

--- Portugal, soil pH <5.5 (50 mg/kg) --- Slovakia, agricultural soils, sand (50 mg/kg) --- Germany (65 mg/kg) --- Slovakia, agricultural soils, loam (70 mg/kg) --- Slovakia, agricultural soils, clay (90 mg/kg)

--- Finland, threshold value (100 mg/kg) --- Austria, agricultural soils (100 mg/kg) --- Czech Republic, agricultural light soils (100 mg/kg) --- Lithuania, agricultural soils (100 mg/kg) --- Belgium (130 mg/kg)

--- France (150 mg/kg) --- Finland, ecological risks (200 mg/kg) --- Portugal, soil pH 5.5 - 7 (200 mg/kg) --- Czech Republic, agricultural other soils (200 mg/kg) --- Finland, health risks (300 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

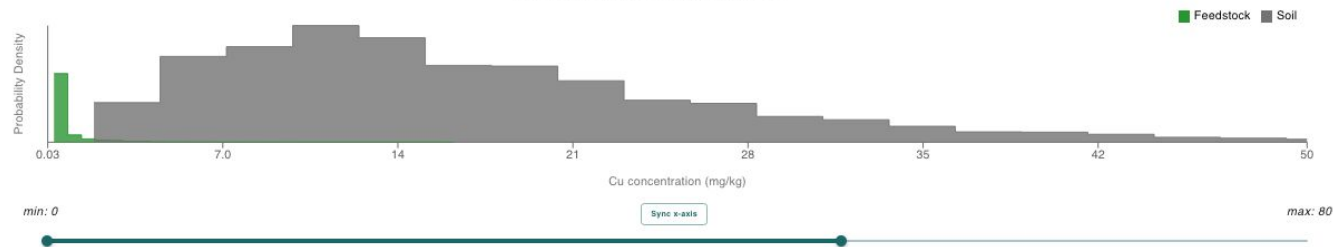
Peridotite

Element

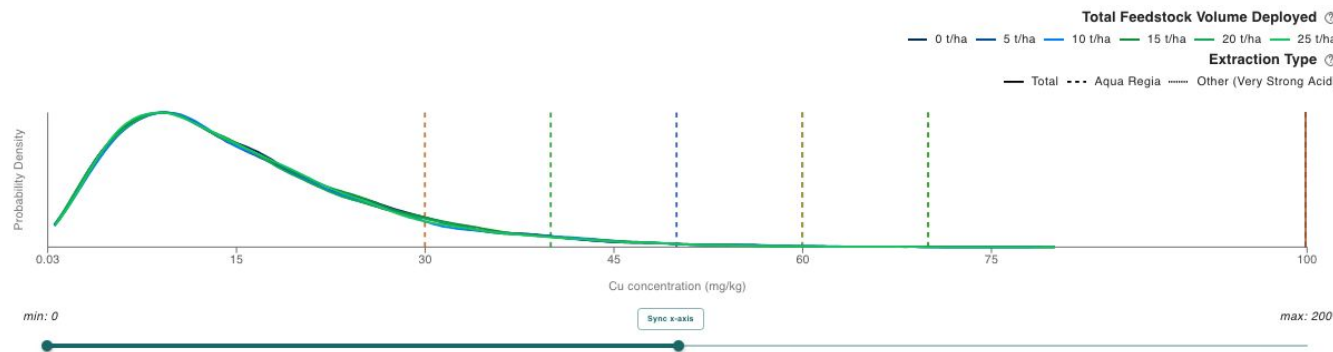
Cu

CALCULATE

Feedstock and soil Cu distributions



Soil Cu after peridotite application



Regulations

--- Slovakia, agricultural soils, sand (30 mg/kg) --- Germany (40 mg/kg) --- Portugal, soil pH <5.5 (50 mg/kg) --- Czech Republic, agricultural light soils (60 mg/kg) --- Slovakia, agricultural soils, loam (60 mg/kg)

--- EPA, plants (70 mg/kg) --- Slovakia, agricultural soils, clay (70 mg/kg) --- France (100 mg/kg) --- Italy (100 mg/kg) --- Austria, agricultural soils (100 mg/kg)

--- Czech Republic, agricultural other soils (100 mg/kg) --- Lithuania, agricultural soils (100 mg/kg) --- Portugal, soil pH 5.5 - 7 (100 mg/kg) --- Australia (100 mg/kg) --- Finland, ecological risks (150 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

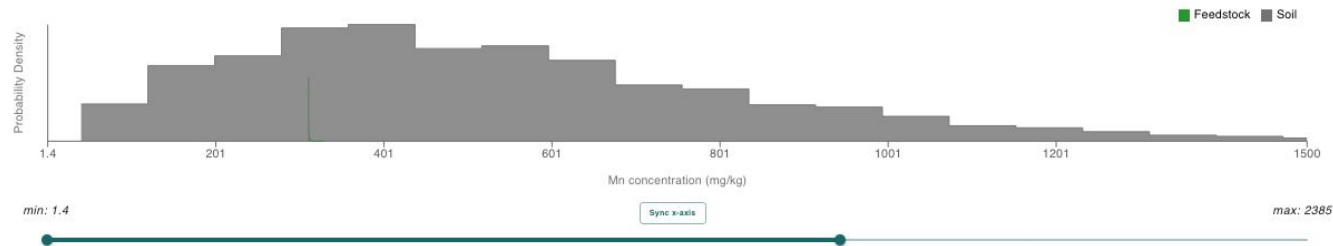
Peridotite

Element

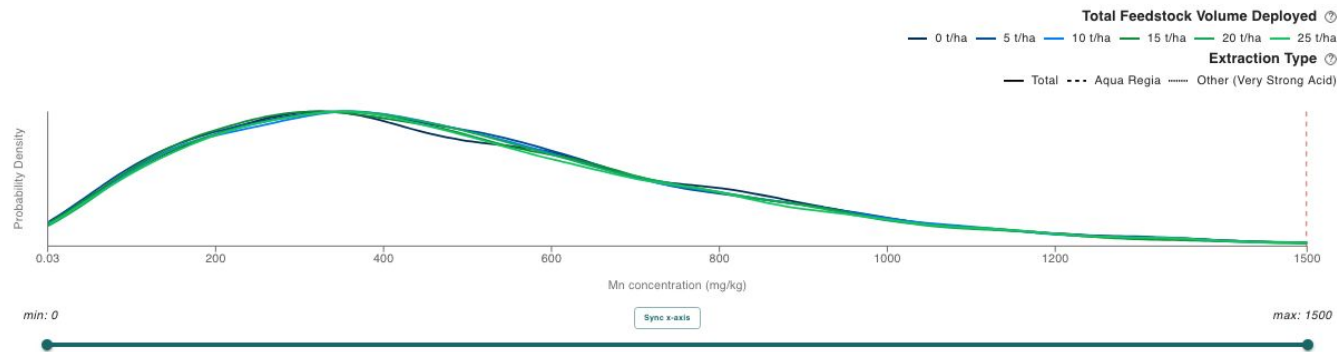
Mn

CALCULATE

Feedstock and soil Mn distributions



Soil Mn after peridotite application



Regulations

--- Lithuania, agricultural soils (1500 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

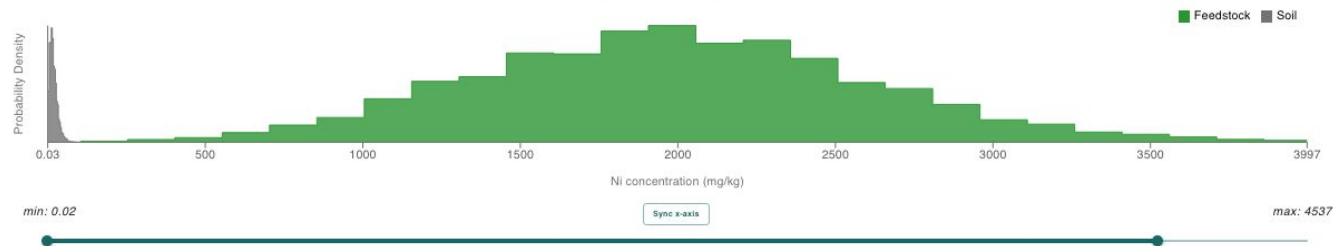
Peridotite

Element

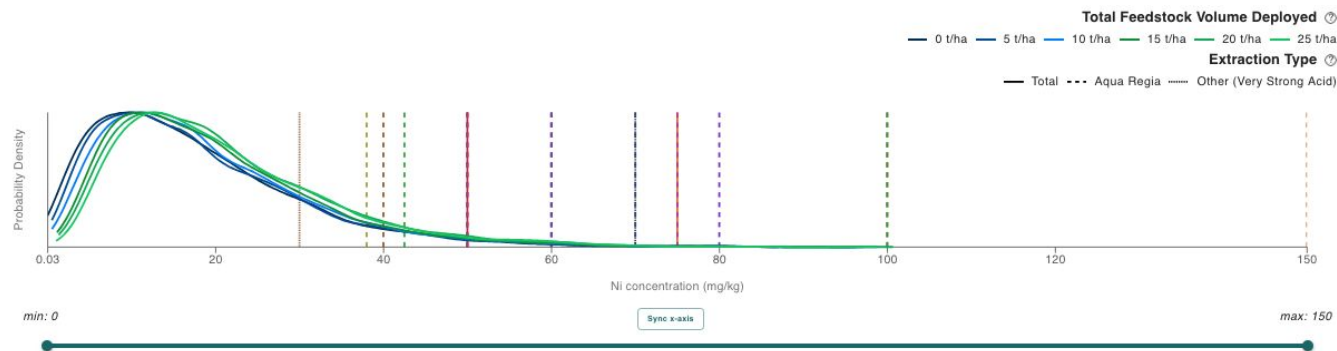
Ni

CALCULATE

Feedstock and soil Ni distributions



Soil Ni after peridotite application



Regulations

----- Brazil, prevention value (30 mg/kg) ----- EPA, plants (38 mg/kg) ----- Slovakia, agricultural soils, sand (40 mg/kg) ----- Germany (42.5 mg/kg) ----- France (50 mg/kg) ----- Slovakia, agricultural soils, loam (50 mg/kg)

----- Finland, threshold value (50 mg/kg) ----- Czech Republic, agricultural light soils (60 mg/kg) ----- Slovakia, agricultural soils, clay (60 mg/kg) ----- Austria, agricultural soils (60 mg/kg) ----- Australia (60 mg/kg)

----- Portugal (70 mg/kg) ----- Brazil, threshold value (70 mg/kg) ----- Italy (75 mg/kg) ----- Lithuania, agricultural soils (75 mg/kg) ----- Czech Republic, agricultural other soils (80 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

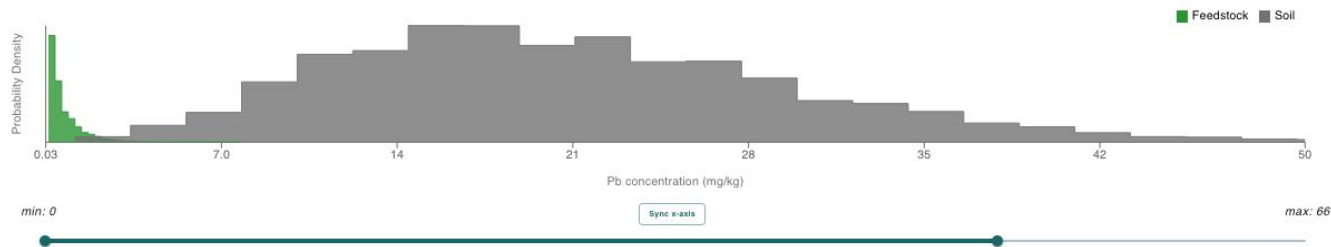
Peridotite

Element

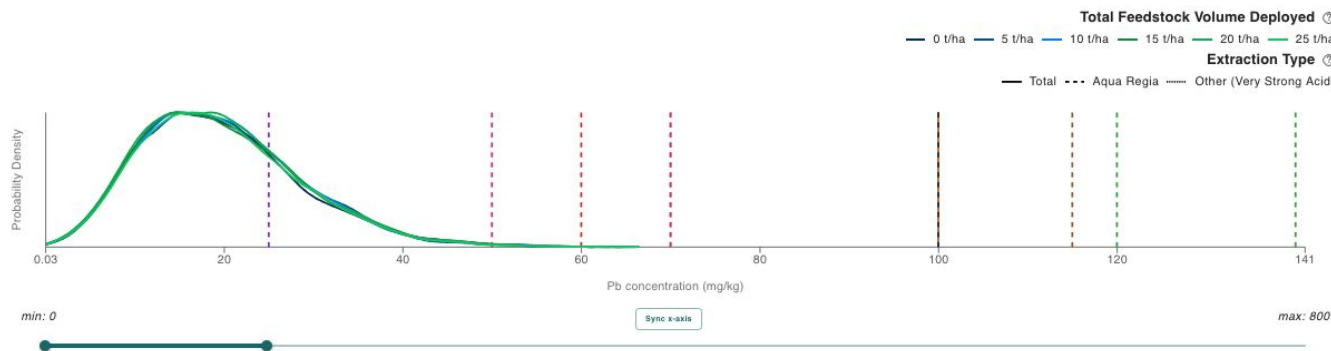
Pb

CALCULATE

Feedstock and soil Pb distributions



Soil Pb after peridotite application



Regulations

--- Slovakia, agricultural soils, sand (25 mg/kg) --- Portugal, soil pH <5.5 (50 mg/kg) --- Finland, threshold value (60 mg/kg) --- Germany (70 mg/kg) --- Slovakia, agricultural soils, loam (70 mg/kg)

--- France (100 mg/kg) --- Italy (100 mg/kg) --- Czech Republic, agricultural light soils (100 mg/kg) --- Lithuania, agricultural soils (100 mg/kg) --- Austria, agricultural soils (100 mg/kg)

--- Slovakia, agricultural soils, clay (115 mg/kg) --- EPA, plants (120 mg/kg) --- Czech Republic, agricultural other soils (140 mg/kg) --- Finland, ecological risks (200 mg/kg) --- Belgium (200 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

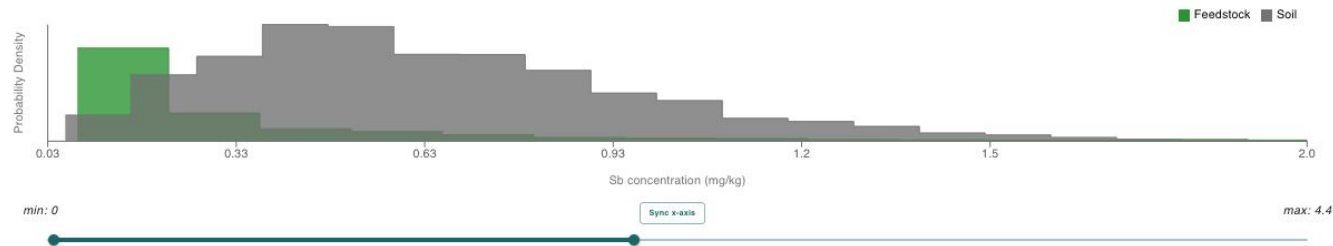
Peridotite

Element

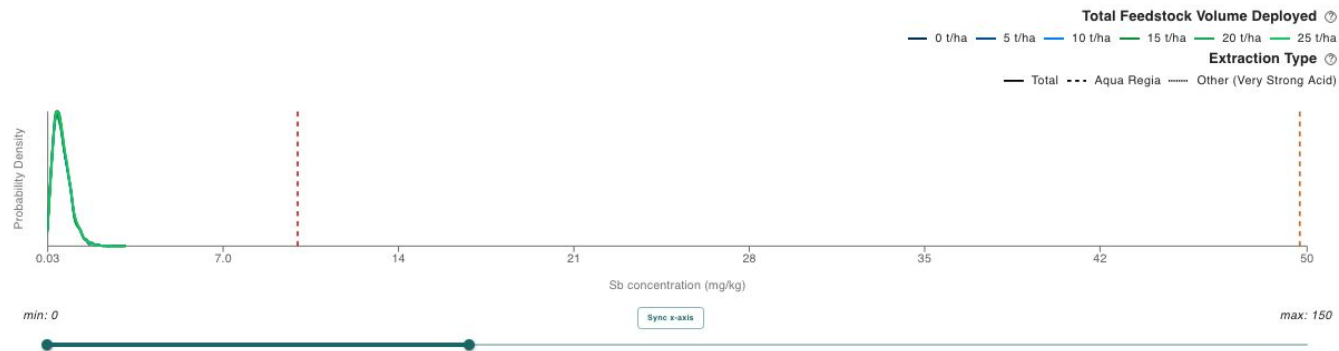
Sb

CALCULATE

Feedstock and soil Sb distributions



Soil Sb after peridotite application



Regulations

--- Finland, ecological risks (10 mg/kg) --- Finland, health risks (50 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

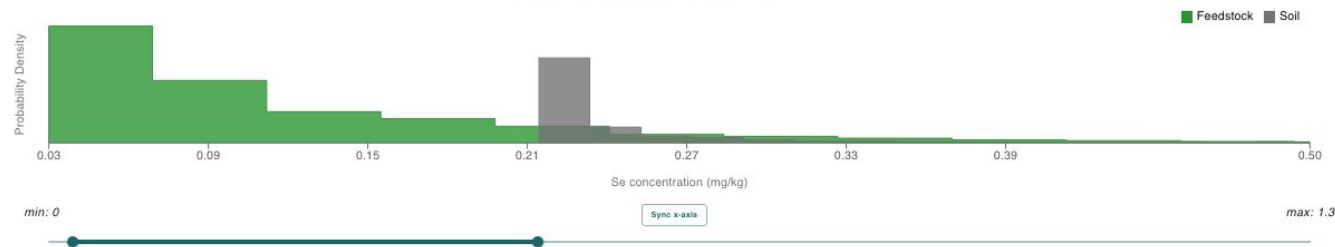
Peridotite

Element

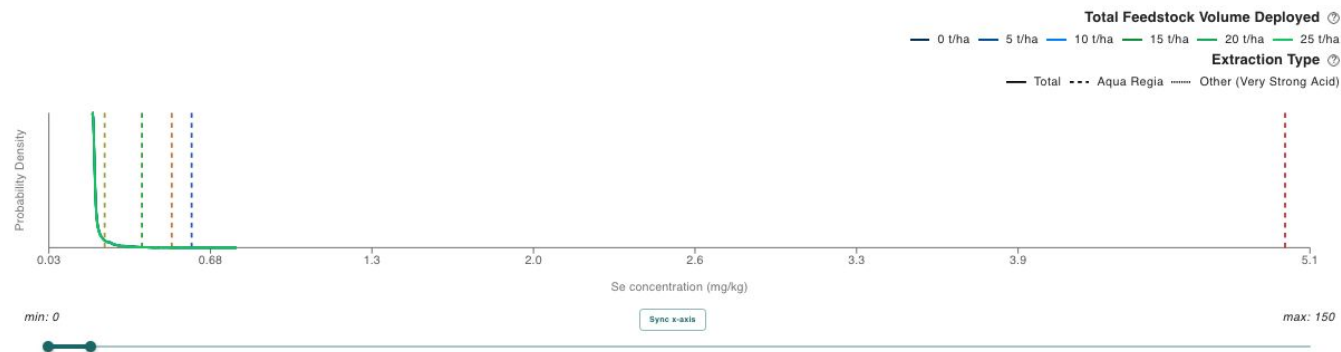
Se

CALCULATE

Feedstock and soil Se distributions



Soil Se after peridotite application



Regulations

--- Slovakia, agricultural soils, sand (0.25 mg/kg) --- Slovakia, agricultural soils, loam (0.4 mg/kg) --- EPA, plants (0.52 mg/kg) --- Slovakia, agricultural soils, clay (0.6 mg/kg) --- Lithuania, agricultural soils (5 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

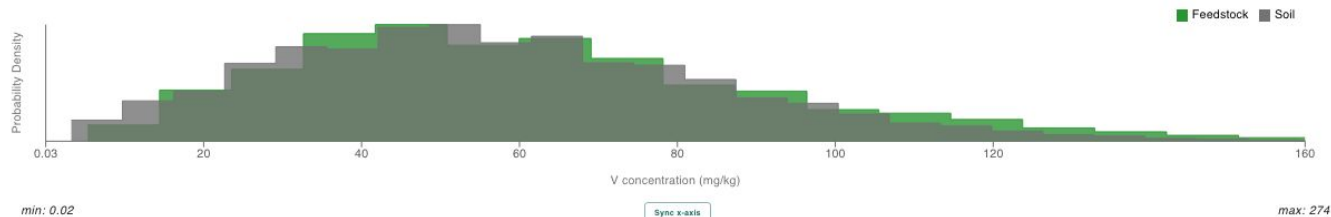
Peridotite

Element

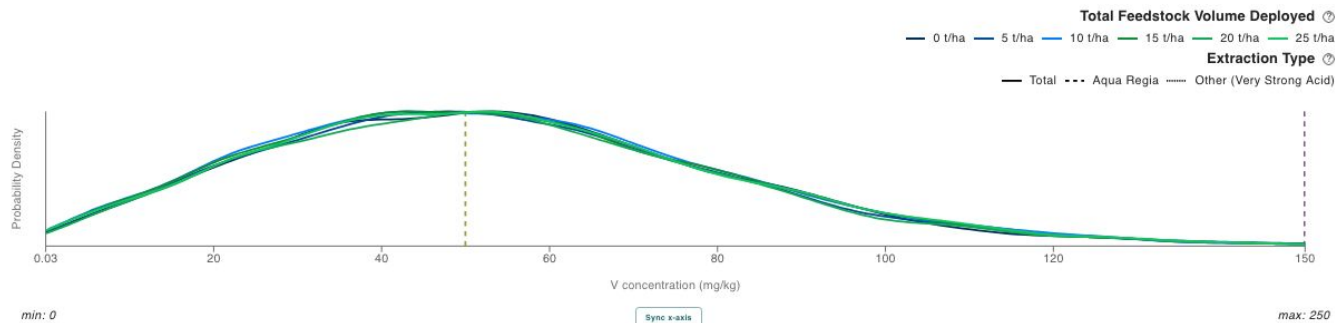
V

CALCULATE

Feedstock and soil V distributions



Soil V after peridotite application



Regulations

- Austria, agricultural soils (50 mg/kg)
- Finland, ecological risks (150 mg/kg)
- Czech Republic, agricultural light soils (150 mg/kg)
- Lithuania, agricultural soils (150 mg/kg)
- Czech Republic, agricultural other soils (220 mg/kg)
- Finland, health risks (250 mg/kg)



Metal Accumulation Calculator (MAC)

Feedstock Type

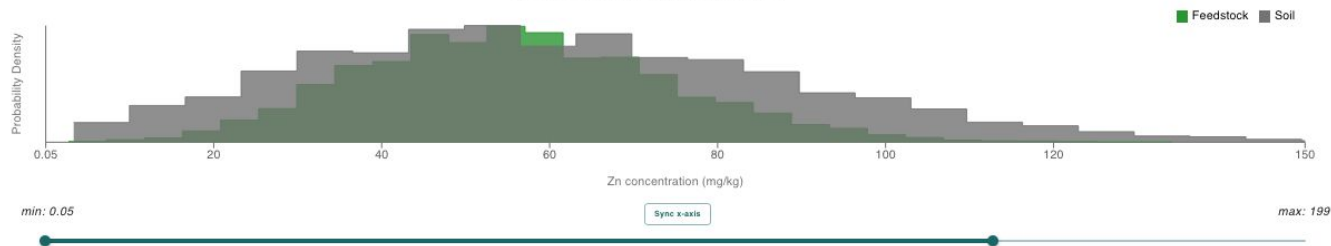
Peridotite

Element

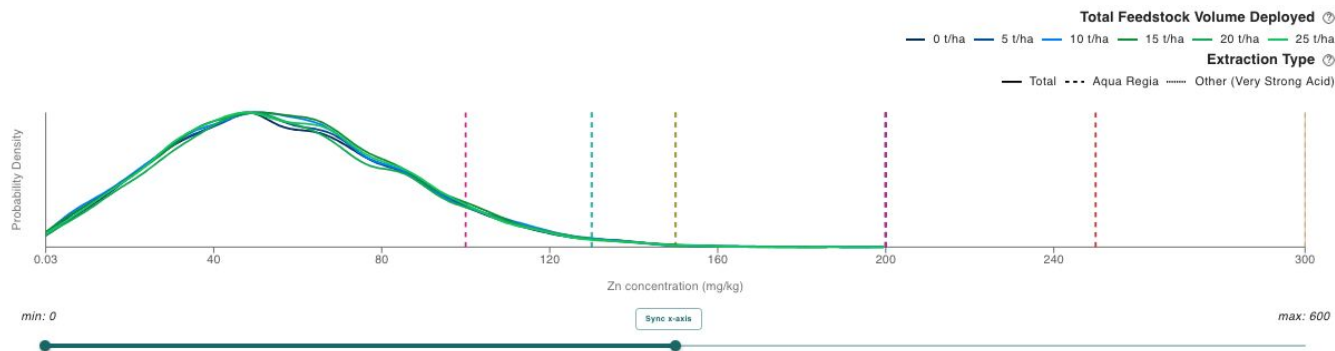
Zn

CALCULATE

Feedstock and soil Zn distributions



Soil Zn after peridotite application



Regulations

- Slovakia, agricultural soils, sand (100 mg/kg) --- Czech Republic, agricultural light soils (130 mg/kg) --- Germany (130 mg/kg) --- Slovakia, agricultural soils, loam (150 mg/kg)
- Portugal, soil pH <5.5 (150 mg/kg) --- Czech Republic, agricultural other soils (200 mg/kg) --- Slovakia, agricultural soils, clay (200 mg/kg) --- Australia (200 mg/kg) --- Finland, threshold value (200 mg/kg)
- Finland, ecological risks (250 mg/kg) --- France (300 mg/kg) --- Italy (300 mg/kg) --- Austria, agricultural soils (300 mg/kg) --- Portugal, soil pH 5.5 - 7 (300 mg/kg) --- Austria, agricultural soils (300 mg/kg)