## Distributions Herd=high-performing, Indicator=CC kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -66.44922 | -66.26202 | -71.54013 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.0581993 |
| Std Dev | 0.0194827 |
| Std Err Mean | 0.005207 |
| Upper 95% Mean | 0.0593483 |
| Lower 95% Mean | 0.0496503 |
| N | 14 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.0581993 | 0.005207 | 0.0465503 | 0.0698483 |
| Dispersion σ | 0.0194827 | 0.0038865 | 0.0141241 | 0.0313874 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -71.54013 |
| AICc | -66.44922 |
| BIC | -66.26202 |

**Goodness-of-Fit Test**

| | W | Prob>W |
|---|---|---|
| Shapiro-Wilk | 0.9837322 | 0.9909 |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 0.1290055 | 0.9924 |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=high-performing, Indicator=CC-biogenic kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -254.4391 | -254.2519 | -259.53 |

**Summary Statistics**

| | |
|---|---|
| Mean | 7.1438e-5 |
| Std Dev | 2.365e-5 |
| Std Err Mean | 6.3207e-6 |
| Upper 95% Mean | 0.0000851 |
| Lower 95% Mean | 5.7783e-5 |
| N | 14 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 7.1438e-5 | 6.3207e-6 | 5.7783e-5 | 0.0000851 |
| Dispersion σ | 2.365e-5 | 4.73e-6 | 1.7140e-5 | 0.0000381 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -259.53 |
| AICc | -254.4391 |
| BIC | -254.2519 |

**Goodness-of-Fit Test**

| | W | Prob>W |
|---|---|---|
| Shapiro-Wilk | 0.9590798 | 0.2962 |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 0.436192 | 0.2800 |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=high-performing, Indicator=CC-fossil kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -66.59468 | -66.40747 | -71.68559 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.0578514 |
| Std Dev | 0.0193817 |
| Std Err Mean | 0.005179 |
| Upper 95% Mean | 0.0690421 |
| Lower 95% Mean | 0.0466607 |
| N | 14 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.0578514 | 0.00518 | 0.0466607 | 0.0690421 |
| Dispersion σ | 0.0193817 | 0.0038763 | 0.0140509 | 0.0312248 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -71.68559 |
| AICc | -66.59468 |
| BIC | -66.40747 |

**Goodness-of-Fit Test**

| | W | Prob>W |
|---|---|---|
| Shapiro-Wilk | 0.9840368 | 0.9918 |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 0.1275518 | 0.9908 |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=high-performing, Indicator=CC-LTU kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -215.9888 | -215.8016 | -221.0797 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.0002764 |
| Std Dev | 9.337e-5 |
| Std Err Mean | 2.494e-5 |
| Upper 95% Mean | 0.0003304 |
| Lower 95% Mean | 0.0002225 |
| N | 14 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.0002764 | 2.494e-5 | 0.0002225 | 0.0003304 |
| Dispersion σ | 9.337e-5 | 1.8674e-5 | 6.769e-5 | 0.0001504 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -221.0797 |
| AICc | -215.9888 |
| BIC | -215.8016 |

**Goodness-of-Fit Test**

| | W | Prob>W |
|---|---|---|
| Shapiro-Wilk | 0.9217728 | 0.2332 |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 0.4895048 | 0.1952 |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=high-performing, Indicator=POCP kgNMVOCeq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -192.0376 | -191.8504 | -197.1285 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.0006584 |
| Std Dev | 0.0002196 |
| Std Err Mean | 0.0000587 |
| Upper 95% Mean | 0.0007852 |
| Lower 95% Mean | 0.0005315 |
| N | 14 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.0006584 | 0.0000587 | 0.0005315 | 0.0007852 |
| Dispersion σ | 0.0002196 | 4.392e-5 | 0.0001592 | 0.0003538 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -197.1285 |
| AICc | -192.0376 |
| BIC | -191.8504 |

**Goodness-of-Fit Test**

| | W | Prob>W |
|---|---|---|
| Shapiro-Wilk | 0.92526 | 0.2915 |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 0.4654033 | 0.2204 |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=low-performing, Indicator=CC kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -54.00769 | -53.82048 | -59.09859 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.1159467 |
| Std Dev | 0.0303825 |
| Std Err Mean | 0.0081201 |
| Upper 95% Mean | 0.1334891 |
| Lower 95% Mean | 0.0984044 |
| N | 14 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.1159467 | 0.0081201 | 0.0984044 | 0.1334891 |
| Dispersion σ | 0.0303825 | 0.0060765 | 0.0220259 | 0.0489475 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -59.09859 |
| AICc | -54.00769 |
| BIC | -53.82048 |

**Goodness-of-Fit Test**

| | W | Prob>W |
|---|---|---|
| Shapiro-Wilk | 0.9417745 | 0.4415 |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 0.3272089 | 0.5028 |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=low-performing, Indicator=CC-biogenic kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -234.8346 | -234.6474 | -239.9256 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.0001618 |
| Std Dev | 4.7633e-5 |
| Std Err Mean | 1.273e-5 |
| Upper 95% Mean | 0.0001943 |
| Lower 95% Mean | 0.0001343 |
| N | 14 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.0001618 | 1.273e-5 | 0.0001343 | 0.0001893 |
| Dispersion σ | 4.7633e-5 | 9.5266e-6 | 3.4531e-5 | 7.6738e-5 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -239.9256 |
| AICc | -234.8346 |
| BIC | -234.6474 |

**Goodness-of-Fit Test**

| | W | Prob>W |
|---|---|---|
| Shapiro-Wilk | 0.938556 | 0.4001 |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 0.3066662 | 0.5512 |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=low-performing, Indicator=CC-fossil kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -54.21937 | -54.03217 | -59.31028 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.1151448 |
| Std Dev | 0.0301537 |
| Std Err Mean | 0.0080589 |
| Upper 95% Mean | 0.132555 |
| Lower 95% Mean | 0.0977346 |
| N | 14 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.1151448 | 0.0080589 | 0.0977346 | 0.132555 |
| Dispersion σ | 0.0301537 | 0.0060307 | 0.02186 | 0.0485788 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -59.31028 |
| AICc | -54.21937 |
| BIC | -54.03217 |

**Goodness-of-Fit Test**

| | W | Prob>W |
|---|---|---|
| Shapiro-Wilk | 0.9415909 | 0.4391 |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 0.3294871 | 0.5000 |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=low-performing, Indicator=CC-LTU kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -195.6814 | -195.4942 | -200.7723 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.0006402 |
| Std Dev | 0.0001928 |
| Std Err Mean | 5.1538e-5 |
| Upper 95% Mean | 0.0007515 |
| Lower 95% Mean | 0.0005288 |
| N | 14 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.0006402 | 5.1538e-5 | 0.0005288 | 0.0007515 |
| Dispersion σ | 0.0001928 | 3.8567e-5 | 0.0001398 | 0.0003107 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -200.7723 |
| AICc | -195.6814 |
| BIC | -195.4942 |

**Goodness-of-Fit Test**

| | W | Prob>W |
|---|---|---|
| Shapiro-Wilk | 0.9394101 | 0.4108 |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 0.3090067 | 0.5444 |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=low-performing, Indicator=POCP kgNMVOCeq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -172.0698 | -171.8826 | -177.1607 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.0015071 |
| Std Dev | 0.0004481 |
| Std Err Mean | 0.0001198 |
| Upper 95% Mean | 0.0017658 |
| Lower 95% Mean | 0.0012483 |
| N | 14 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.0015071 | 0.0001198 | 0.0012483 | 0.0017658 |
| Dispersion σ | 0.0004481 | 8.962e-5 | 0.0003249 | 0.000722 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -177.1607 |
| AICc | -172.0698 |
| BIC | -171.8826 |

**Goodness-of-Fit Test**

| | W | Prob>W |
|---|---|---|
| Shapiro-Wilk | 0.93772 | 0.3899 |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 0.300931 | 0.5480 |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=mid-performing, Indicator=CC kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -116.386 | -114.2943 | -120.886 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.0786123 |
| Std Dev | 0.0262773 |
| Std Err Mean | 0.0050571 |
| Upper 95% Mean | 0.0902073 |
| Lower 95% Mean | 0.0670174 |
| N | 27 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.0786123 | 0.0050571 | 0.0692174 | 0.0900073 |
| Dispersion σ | 0.0262773 | 0.0036796 | 0.0206938 | 0.0360113 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -120.886 |
| AICc | -116.386 |
| BIC | -114.2943 |

**Goodness-of-Fit Test**

| | W | Prob<W |
|---|---|---|
| Shapiro-Wilk | 0.826196 | 0.0004* |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 1.2347045 | 0.0018* |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=mid-performing, Indicator=CC-biogenic kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -459.3015 | -457.2098 | -463.8015 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.0001033 |
| Std Dev | 4.5887e-5 |
| Std Err Mean | 8.8309e-6 |
| Upper 95% Mean | 0.0002215 |
| Lower 95% Mean | 8.5177e-5 |
| N | 27 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.0001033 | 8.8309e-6 | 8.5177e-5 | 0.0001215 |
| Dispersion σ | 4.5887e-5 | 6.4254e-6 | 3.6137e-5 | 6.2885e-5 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -463.8015 |
| AICc | -459.3015 |
| BIC | -457.2098 |

**Goodness-of-Fit Test**

| | W | Prob<W |
|---|---|---|
| Shapiro-Wilk | 0.7945641 | 0.0001* |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 1.3809282 | 0.0008* |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=mid-performing, Indicator=CC-fossil kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -116.8542 | -114.7625 | -121.3542 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.079105 |
| Std Dev | 0.0265005 |
| Std Err Mean | 0.0050134 |
| Upper 95% Mean | 0.0894103 |
| Lower 95% Mean | 0.0687998 |
| N | 27 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.079105 | 0.0050134 | 0.0687998 | 0.0894103 |
| Dispersion σ | 0.0265005 | 0.0037128 | 0.0208478 | 0.0363152 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -121.3542 |
| AICc | -116.8542 |
| BIC | -114.7625 |

**Goodness-of-Fit Test**

| | W | Prob<W |
|---|---|---|
| Shapiro-Wilk | 0.826662 | 0.0004* |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 1.2321079 | 0.0025* |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=mid-performing, Indicator=CC-LTU kgCO2eq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -383.1844 | -381.0928 | -387.6844 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.0004039 |
| Std Dev | 0.0001879 |
| Std Err Mean | 3.6156e-5 |
| Upper 95% Mean | 0.0004783 |
| Lower 95% Mean | 0.0003296 |
| N | 27 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.0004039 | 3.6156e-5 | 0.0003296 | 0.0004783 |
| Dispersion σ | 0.0001879 | 0.0000263 | 0.000148 | 0.0002575 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -387.6844 |
| AICc | -383.1844 |
| BIC | -381.0928 |

**Goodness-of-Fit Test**

| | W | Prob<W |
|---|---|---|
| Shapiro-Wilk | 0.7939033 | 0.0001* |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 1.3859117 | 0.0012* |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.

## Distributions Herd=mid-performing, Indicator=POCP kgNMVOCeq

### Energy

**Compare Distributions**

| Show | Distribution | AICc | BIC | -2*LogLikelihood |
|---|---|---|---|---|
| ☑ | Normal | -337.9583 | -335.8666 | -342.4583 |

**Summary Statistics**

| | |
|---|---|
| Mean | 0.0009572 |
| Std Dev | 0.0003431 |
| Std Err Mean | 8.354e-5 |
| Upper 95% Mean | 0.0011289 |
| Lower 95% Mean | 0.0007854 |
| N | 27 |
| N Missing | 0 |

**Fitted Normal Distribution**

| Parameter | Estimate | Std Error | Lower 95% | Upper 95% |
|---|---|---|---|---|
| Location μ | 0.0009572 | 8.354e-5 | 0.0007854 | 0.0011289 |
| Dispersion σ | 0.0003431 | 6.0786e-5 | 0.0003419 | 0.0005949 |

**Measures**

| | |
|---|---|
| -2*LogLikelihood | -342.4583 |
| AICc | -337.9583 |
| BIC | -335.8666 |

**Goodness-of-Fit Test**

| | W | Prob<W |
|---|---|---|
| Shapiro-Wilk | 0.7943774 | 0.0001* |
| | **Simulated** | |
| | **A²** | **p-Value** |
| Anderson-Darling | 1.3812607 | 0.0008* |

Note: Ho = The data is from the Normal distribution. Small p-values reject Ho.