

SUPPLEMENTARY INFORMATION

Table S1: Breakdown of chemical precursors used in the ZnO NW synthesis process that were not found in the Ecolnvent Database into their base chemicals.

Input Flow	Amount	Unit	Provider
Zinc Nitrate Hexahydrate	297.5	g	
<i>nitric acid, without water, in 50% solution state</i>	<i>126.0</i>	<i>g</i>	<i>market for nitric acid, without water, in 50% solution state nitric acid, without water, in 50% solution state Cutoff, S - RER w/o RU</i>
<i>water, deionised</i>	<i>90.11</i>	<i>g</i>	<i>market for water, deionised water, deionised Cutoff, S - Europe without Switzerland</i>
<i>Zinc oxide</i>	<i>81.38</i>	<i>g</i>	<i>market for zinc oxide zinc oxide Cutoff, S - GLO</i>
Hexamethylenetetramine	140.2	g	
<i>ammonia, anhydrous, liquid</i>	<i>68.14</i>	<i>g</i>	<i>market for ammonia, anhydrous, liquid ammonia, anhydrous, liquid Cutoff, S - RER</i>
<i>formaldehyde</i>	<i>180.2</i>	<i>g</i>	<i>market for formaldehyde formaldehyde Cutoff, S - RER</i>
Zinc Acetate Dihydrate	219.5	g	
<i>acetic acid, without water, in 98% solution state</i>	<i>120.1</i>	<i>g</i>	<i>market for acetic acid, without water, in 98% solution state acetic acid, without water, in 98% solution state Cutoff, S - GLO</i>
<i>water, deionised</i>	<i>18.02</i>	<i>g</i>	<i>market for water, deionised water, deionised Cutoff, S - Europe without Switzerland</i>
<i>zinc oxide</i>	<i>81.40</i>	<i>g</i>	<i>market for zinc oxide zinc oxide Cutoff, S - GLO</i>
Tartaric Acid	150.1	g	
<i>maleic anhydride</i>	<i>98.06</i>	<i>g</i>	<i>market for maleic anhydride maleic anhydride Cutoff, S - GLO</i>
<i>hydrogen peroxide, without water, in 50% solution state</i>	<i>34.01</i>	<i>g</i>	<i>market for hydrogen peroxide, without water, in 50% solution state hydrogen peroxide, without water, in 50% solution state Cutoff, S - RER</i>
<i>water, deionised</i>	<i>18.02</i>	<i>g</i>	<i>market for water, deionised water, deionised Cutoff, S - Europe without Switzerland</i>
Sodium tartrate dibasic dihydrate	230.08	g	
<i>sodium hydroxide, without water, in 50% solution state</i>	<i>80.00</i>	<i>g</i>	<i>market for sodium hydroxide, without water, in 50% solution state sodium hydroxide, without water, in 50% solution state Cutoff, S - RER</i>
<i>tartaric acid</i>	<i>150.12</i>	<i>g</i>	<i>Shown above</i>