



Computation of long-term annual renewable water resources (RWR) by country (in km<sup>3</sup>/year, average)

## Portugal

Internal RWR		
Precipitation (mm/year)	[1]	854
Area of the country (1000 ha)	[2]	9 223
Precipitation (km <sup>3</sup> /year)	[3]	78.76 = $\frac{([1]/1000000) \times ([2] \times 10)}{1}$
Surface water: produced internally	[4]	38
Groundwater: produced internally	[5]	4
Overlap between surface water and groundwater	[6]	4 (a)
<b>Total internal renewable water resources</b>	[7]	38 = $[4]+[5]-[6]$
External RWR		
	Total	Accounted
<u>Surface water</u>		
Surface water entering the country	33.4	
Inflow not submitted to treaties		[8] 33.4
Inflow submitted to treaties		[9] 0
Inflow secured through treaties		[10] 6 (b)
Flow in border rivers	12	[11] 39.4 = $[8]+[9]+[10]$
Accounted inflow		
Surface water leaving the country	0	
Outflow not submitted to treaties		0
Outflow submitted to treaties		0
Outflow secured through treaties		[12] 0
Total external renewable surface water		[13] 39.4 = $[11]-[12]$
<u>Groundwater</u>		
Groundwater entering the country	0	[14] 0
Groundwater leaving the country	0	0
<b>Total external renewable water resources</b>		[15] 39.4 = $[13]+[14]$
Total RWR		
Surface water	[16]	77.4 = $[4]+[13]$
Groundwater	[17]	4 = $[5]+[14]$
Overlap between surface water and groundwater	[6]	4 (a)
<b>Total renewable water resources</b>	[18]	77.4 = $[16]+[17]-[6]$
Dependency ratio (%)	[19]	50.9 = $\frac{100 \times ([11]+[14])}{([11]+[14]+[7])}$

Metadata:

(a) Approximately. Overlap is 100% of groundwater recharge; all the groundwater is drained by the rivers and becomes the low flow of water courses. The ground is a base rock so there is probably no groundwater flowing out.  
 (b) The rule of 50% of border flow was applied to the Mihno river. So 6 km<sup>3</sup>/yr are accounted as additional external resource.