

# DANUBE RIVER BASIN MANAGEMENT PLAN

UPDATE 2021

## ANNEX 4

Industrial Emission Inventory

**ICPDR** **IKSD**

International Commission  
for the Protection  
of the Danube River  
Internationale Kommission  
zum Schutz der Donau  
[www.icpdr.org](http://www.icpdr.org)



Industrial pollutant release data were collected from the E-PRTR database (note that some data might have been updated since November 2021) and directly from the countries which do not report under the E-PRTR system. The data served the assessments of the point source organic matter and nutrient emissions via direct industrial dischargers for the reference year 2018. Summarizing tables of the data submitted are presented in the followings.

**Table 1: Number of industrial facilities with reported Chemical Oxygen Demand (COD) discharge according to industrial sectors and countries**

Activity	DE	AT	CZ	SK	HU	SI	HR	BA	ME	RS	RO	BG	MD	UA	Basin
Energy sector	0	0	0	1	4	0	0	0	0	0	3	0	0	0	8
Production and processing of metals	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
Mineral industry	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Chemical industry	2	2	0	2	2	0	0	0	0	0	2	0	0	0	10
Waste and industrial wastewater management	0	4	0	1	3	0	0	0	0	0	0	0	0	0	8
Paper and wood production processing	5	4	0	2	1	2	0	0	0	0	0	1	0	1	16
Intensive livestock production and aquaculture	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Products from the food and beverage sector	0	1	0	0	2	0	0	0	0	1	0	0	0	0	4
Other activities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>7</b>	<b>11</b>	<b>0</b>	<b>7</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>51</b>

**Table 2: Chemical Oxygen Demand (COD) discharges according to industrial sectors and countries (t/year)**

Activity	DE	AT	CZ	SK	HU	SI	HR	BA	ME	RS	RO	BG	MD	UA	Basin
Energy sector	0	0	0	806	3,417	0	0	0	0	0	919	0	0	0	5,141
Production and processing of metals	0	0	0	371	1,176	0	0	0	0	0	0	0	0	0	1,547
Mineral industry	0	0	0	0	210	0	0	0	0	0	0	0	0	0	210
Chemical industry	1,236	898	0	445	669	0	0	0	0	0	11,759	0	0	0	15,007
Waste and industrial wastewater management	0	14,342	0	185	727	0	0	0	0	0	0	0	0	0	15,253
Paper and wood production processing	7,791	9,855	0	3,598	2,208	621	0	0	0	0	0	815	0	131	25,019
Intensive livestock production and aquaculture	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Products from the food and beverage sector	0	702	0	0	1,158	0	0	0	0	185	0	0	0	0	2,045
Other activities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>9,027</b>	<b>25,797</b>	<b>0</b>	<b>5,405</b>	<b>9,565</b>	<b>621</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>185</b>	<b>12,677</b>	<b>817</b>	<b>0</b>	<b>131</b>	<b>64,224</b>

**Table 3: Number of industrial facilities with reported Total Nitrogen (TN) discharge according to industrial sectors and countries**

Activity	DE	AT	CZ	SK	HU	SI	HR	BA	ME	RS	RO	BG	MD	UA	Basin
Energy sector	1	1	0	1	3	0	0	3	0	0	0	0	0	0	9
Production and processing of metals	0	0	0	1	0	0	0	0	0	1	1	0	0	0	3
Mineral industry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chemical industry	2	1	0	1	2	0	1	1	0	0	1	0	0	0	9
Waste and industrial wastewater management	0	1	0	1	1	0	0	0	0	0	0	0	0	0	3
Paper and wood production processing	0	1	0	1	0	0	0	0	0	0	0	0	0	1	3
Intensive livestock production and aquaculture	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Products from the food and beverage sector	0	1	0	0	0	0	0	2	0	1	0	0	0	0	4
Other activities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>3</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>34</b>

**Table 4: Total Nitrogen (TN) discharges according to industrial sectors and countries (t/year)**

Activity	DE	AT	CZ	SK	HU	SI	HR	BA	ME	RS	RO	BG	MD	UA	Basin
Energy sector	52	72	0	142	608	0	0	7	0	0	0	0	0	0	881
Production and processing of metals	0	0	0	145	0	0	0	0	0	70	522	0	0	0	737
Mineral industry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chemical industry	183	91	0	107	241	0	62	0	0	0	58	0	0	0	742
Waste and industrial wastewater management	0	91	0	60	83	0	0	0	0	0	0	0	0	0	234
Paper and wood production processing	0	55	0	106	0	0	0	0	0	0	0	0	0	98	259
Intensive livestock production and aquaculture	0	0	0	0	0	0	0	0	0	0	0	218	0	0	218
Products from the food and beverage sector	0	224	0	0	0	0	0	14	0	52	0	0	0	0	290
Other activities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>235</b>	<b>532</b>	<b>0</b>	<b>560</b>	<b>932</b>	<b>0</b>	<b>62</b>	<b>21</b>	<b>0</b>	<b>122</b>	<b>580</b>	<b>218</b>	<b>0</b>	<b>98</b>	<b>3,360</b>

**Table 5: Number of industrial facilities with reported Total Phosphorus (TP) discharge according to industrial sectors and countries**

Activity	DE	AT	CZ	SK	HU	SI	HR	BA	ME	RS	RO	BG	MD	UA	Basin
Energy sector	0	0	0	1	2	0	0	2	0	0	1	0	0	0	6
Production and processing of metals	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Mineral industry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chemical industry	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2
Waste and industrial wastewater management	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
Paper and wood production processing	1	1	0	1	1	0	0	0	0	0	0	1	0	1	6
Intensive livestock production and aquaculture	0	0	0	0	1	0	0	0	0	0	0	3	0	0	4
Products from the food and beverage sector	0	1	0	0	0	0	0	2	0	1	0	0	0	0	4
Other activities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>25</b>

**Table 6: Total Phosphorus (TP) discharges according to industrial sectors and countries (t/year)**

Activity	DE	AT	CZ	SK	HU	SI	HR	BA	ME	RS	RO	BG	MD	UA	Basin
Energy sector	0	0	0	13	16	0	0	0	0	0	10	0	0	0	38
Production and processing of metals	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
Mineral industry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chemical industry	6	0	0	0	0	0	0	0	0	40	0	0	0	0	46
Waste and industrial wastewater management	0	26	0	0	10	0	0	0	0	0	0	0	0	0	36
Paper and wood production processing	7	15	0	17	15	0	0	0	0	0	0	5	0	9	68
Intensive livestock production and aquaculture	0	0	0	0	4	0	0	0	0	0	0	109	0	0	113
Products from the food and beverage sector	0	8	0	0	0	0	0	1	0	11	0	0	0	0	20
Other activities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>13</b>	<b>49</b>	<b>0</b>	<b>36</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>51</b>	<b>10</b>	<b>114</b>	<b>0</b>	<b>9</b>	<b>328</b>