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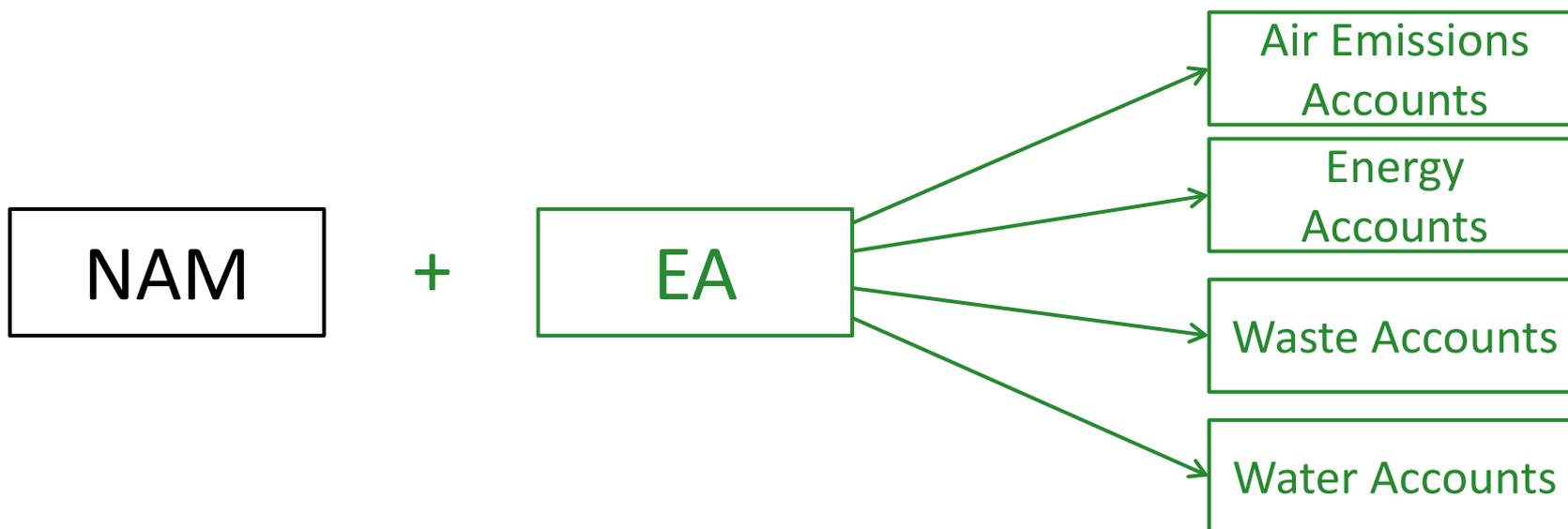
Geneva
14 October 2015

The Austrian “integrated NAMEA”

Objective of a NAMEA

The **objective** of a NAMEA is to show the implications of economic and consumption activities on the environment.

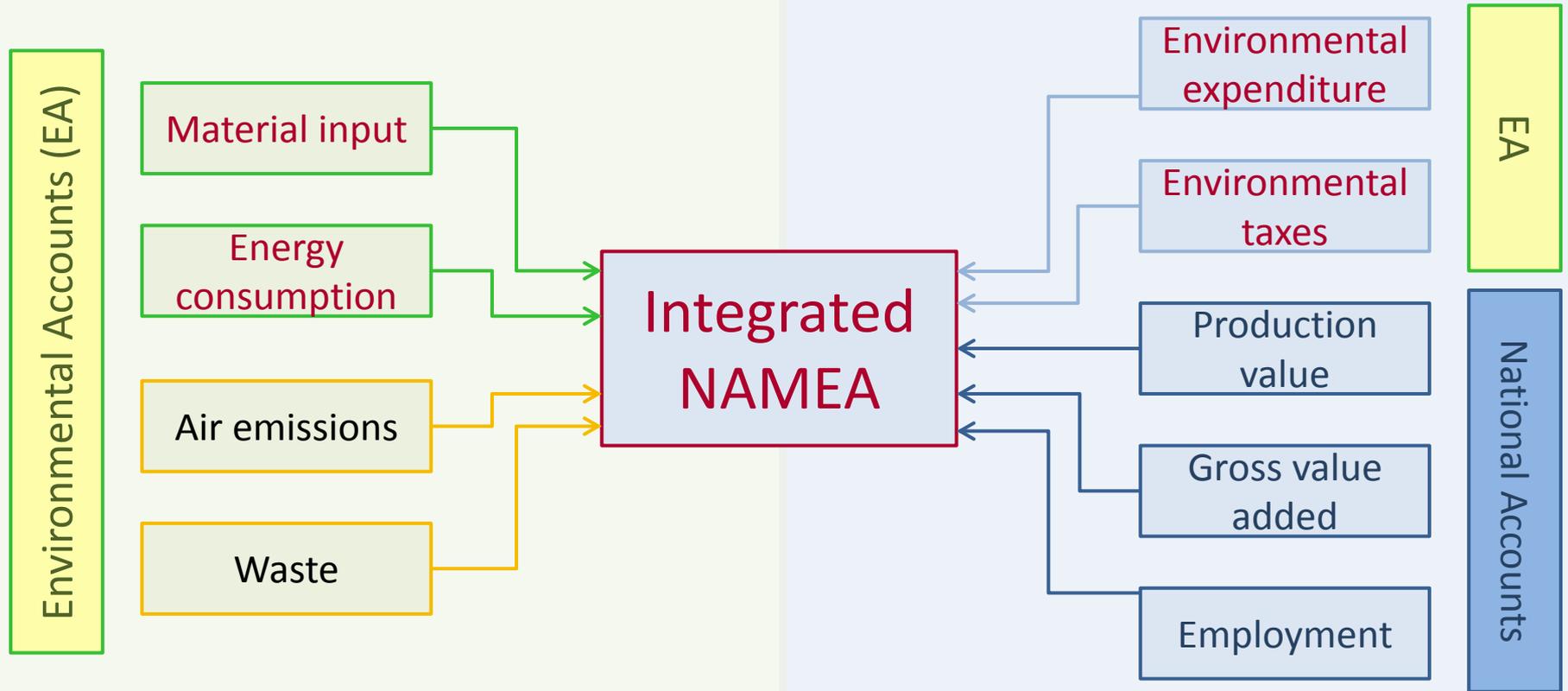
For this purpose **national accounts** data are supplemented by **environmental data**.



Structure of the integrated NAMEEA

Physical flows

Monetary flows



- **Adjustment** of data based on **territory principle** to **residence principle**

e.g energy consumption data and air emissions data

- Identification of the **user/producer/payer**

e.g.:

- the first users of domestically extracted materials (=„extractors“),
- the importers of goods, who are the first domestic users,
- the producers of air emissions,
- the payers of environmental protection expenditure or
- the final payers of environmental taxes.

The integrated NAMEA is broken down by **industries** and **households**.

The structure corresponds to the IEA structure of energy balances.

Industries are divided into 18 categories, whereby the manufacturing sector is more detailed than the services sector.

Private households are taken into account as consumers and not as producers of goods and services.

Breakdown of the integrated NAMEEA

| Name | NACE 2008 | | Name | NACE 2008 |
|-------------------------------------|-----------|--|--|-------------------------------|
| Iron and steel industry | 24 | | Textiles and leather | 13 - 15 |
| Chemical and petrochemical industry | 19 - 21 | | Non specified (industry) | 22, 31, 32 |
| Non-metallic minerals | 23 | | Land transport | 49 |
| Transport equipment | 29, 30 | | Internal nagivation | 50 |
| Machinery | 25 - 28 | | Air transport | 51 |
| Mining and quarrying | 05 - 09 | | Commercial and public services | 33, 36 - 39, 45 - 47, 52 - 96 |
| Food, beverages and tobacco | 10 - 12 | | | |
| Pulp, paper and print | 17, 18 | | Electricity, gas, steam and hot water supply | 35 |
| Wood and wood products | 16 | | Private households | - |
| Construction | 41 - 43 | | Agriculture | 01 - 03 |

| Material input | |
|-----------------------|---|
| Fossil materials | |
| <i>thereof:</i> | <i>Domestic extraction</i> |
| | <i>Imports</i> |
| Biomass | |
| <i>thereof:</i> | <i>Domestic extraction (excl. wood)</i> |
| | <i>Domestic extraction of wood</i> |
| | <i>Imports (excl. wood and wood products)</i> |
| | <i>Imports of wood and wood products</i> |
| Mineral materials | |
| <i>thereof:</i> | <i>Domestic extraction of metallic minerals</i> |
| | <i>Domestic extraction of non-metallic minerals</i> |
| | <i>Imports of metallic minerals</i> |
| | <i>Imports of non-metallic minerals</i> |

| Energy consumption | |
|---------------------------|---|
| | <i>Emission-relevant non-renewable energy sources</i> |
| | <i>Crude oil</i> |
| <i>thereof:</i> | <i>Emission-relevant renewable energy sources</i> |
| | <i>Non emission-relevant renewable energy sources</i> |
| | <i>Other non emission-relevant energy sources</i> |

| Air emissions | |
|---------------|--|
| | SO_2 |
| | NO_x |
| | NMVOC |
| | CH_4 |
| | CO |
| | CO_2 |
| | <i>CO₂ from fossil sources</i> |
| thereof: | <i>CO₂ from biogene sources</i> |
| | <i>CO₂ from other sources</i> |
| | N_2O |
| | NH_3 |
| | PM2.5 |
| | PM10 |

| |
|----------------------|
| Waste |
| Hazardous wastes |
| Non-hazardous wastes |

Environmental protection expenditure

| | |
|-----------------|--|
| <i>thereof:</i> | <i>Protection of ambient air and climate</i> |
| | <i>Waste management</i> |

Environmental taxes

| | |
|-----------------|------------------------|
| <i>thereof:</i> | <i>Energy taxes</i> |
| | <i>Transport taxes</i> |
| | <i>Resource taxes</i> |
| | <i>Pollution taxes</i> |

Structure of the environmental data

Integrated NAMEA 1995 - 2012

| | Figure | Unit | Year | | | | | | | | | | Change in % ¹⁾ | | | |
|---|--|------------|----------|---------|----------|---------|-----------|------------|-----------|------------|----------|------------|---------------------------|--------|-----|--|
| | | | 1995 | 1996 | 1997 | 1998 | ... | 2007 | 2008 | 2009 | 2010 | 2011 | | 2012 | | |
| Economic figures | Production value | mio. € | 323857 | 332494 | 343675 | 356749 | ... | 494446 | 508528 | 483547 | 491496 | 511926 | 519501 | 60 | | |
| | Gross value added | | 172995 | 176506 | 181890 | 188687 | ... | 238636 | 242541 | 232288 | 236442 | 244057 | 246078 | 42 | | |
| | Labour force | FTE | 3261018 | 3285954 | 3298517 | 3324092 | ... | 3515588 | 3620136 | 3569117 | 3593185 | 3646079 | 3678399 | 13 | | |
| Environmental material flows | Material input ²⁾ | 1 000 tons | 209435 | 215581 | 225941 | 221029 | ... | 270474 | 256108 | 238488 | 243389 | 254352 | 250673 | 3) | | |
| | Fossil materials | | 29322 | 30820 | 30809 | 31589 | ... | 39408 | 38969 | 38387 | 40954 | 42394 | 44135 | 51 | | |
| | <i>thereof:</i> Domestic extraction | | 4452 | 4367 | 4265 | 4422 | ... | 3941 | 3759 | 3738 | 3953 | 3736 | 3942 | -11 | | |
| | <i>Imports</i> | | 24870 | 26453 | 26544 | 27167 | ... | 35467 | 35210 | 34649 | 37000 | 38657 | 40193 | 62 | | |
| | Biomass | | 49437 | 49698 | 51805 | 51377 | ... | 64059 | 66568 | 62065 | 62739 | 66609 | 63457 | 28 | | |
| | <i>thereof:</i> Domestic extraction (excl. wood) | | 26716 | 25930 | 27273 | 27054 | ... | 25826 | 28832 | 27724 | 26157 | 28646 | 26147 | -2 | | |
| | <i>Domestic extraction of wood</i> | | 10171 | 11071 | 10849 | 10336 | ... | 14411 | 14933 | 11706 | 12392 | 13179 | 12825 | 26 | | |
| | <i>Imports (excl. wood and wood products)</i> | | 6533 | 6991 | 7563 | 7899 | ... | 12375 | 12569 | 11877 | 12959 | 13528 | 13375 | 105 | | |
| | <i>Imports of wood and wood products</i> | | 6017 | 5706 | 6120 | 6088 | ... | 11447 | 10234 | 10758 | 11232 | 11257 | 11110 | 85 | | |
| | Mineral materials | | 130676 | 135063 | 143327 | 138064 | ... | 167007 | 150572 | 138036 | 139696 | 145349 | 143081 | 9 | | |
| | <i>thereof:</i> Domestic extraction of metallic minerals | | 2307 | 2226 | 2183 | 2155 | ... | 2588 | 2467 | 2347 | 2499 | 2631 | 2519 | 9 | | |
| | <i>Domestic extraction of non-metallic minerals</i> | | 109566 | 112992 | 119006 | 112908 | ... | 128215 | 113512 | 107931 | 104420 | 107237 | 106160 | -3 | | |
| | <i>Imports of metallic minerals</i> | | 11104 | 11525 | 12952 | 14014 | ... | 23006 | 22178 | 16848 | 21373 | 23424 | 22734 | 105 | | |
| | <i>Imports of non-metallic minerals</i> | | 7699 | 8319 | 9186 | 8987 | ... | 13198 | 12415 | 10910 | 11404 | 12056 | 11668 | 52 | | |
| | Energy consumption ²⁾ | | 1665398 | 1748026 | 1769495 | 1779135 | ... | 1945436 | 2017506 | 1944094 | 2027599 | 2012881 | 2031183 | 22 | | |
| | <i>thereof:</i> Emission-relevant non-renewable energy sources | | 836097 | 899883 | 891208 | 896541 | ... | 935630 | 972270 | 905180 | 967569 | 956167 | 907245 | 9 | | |
| | <i>Crude oil</i> | | 368139 | 374285 | 400336 | 400158 | ... | 369042 | 375408 | 359919 | 335986 | 357258 | 360056 | -2 | | |
| | <i>thereof:</i> Emission-relevant renewable energy sources | | 109714 | 117177 | 117193 | 112070 | ... | 198087 | 214315 | 220295 | 246792 | 239299 | 260188 | 137 | | |
| | <i>Non emission-relevant renewable energy sources</i> | | 137165 | 127299 | 134535 | 138847 | ... | 149963 | 155393 | 165485 | 158539 | 144369 | 182143 | 33 | | |
| | <i>Other non emission-relevant energy sources</i> | | 214283 | 229382 | 226223 | 231518 | ... | 292714 | 300119 | 293215 | 318713 | 315786 | 321550 | 50 | | |
| | Air emissions ²⁾ | | | tons | | | | | | | | | | | | |
| | SO ₂ | | 45879 | | 44227 | 39904 | 35302 | ... | 25487 | 23180 | 17747 | 19326 | 18796 | 18017 | -61 | |
| | NO _x | | 154115 | | 168133 | 162127 | 170993 | ... | 191905 | 187383 | 174210 | 174613 | 171067 | 167734 | 9 | |
| NMVOC | 211119 | 203263 | 190105 | | 175811 | ... | 155776 | 147751 | 119809 | 131553 | 125866 | 133122 | -37 | | | |
| CH ₄ | 363808 | 353268 | 338558 | | 331880 | ... | 279060 | 273283 | 268510 | 264704 | 256707 | 252558 | -31 | | | |
| CO | 1163433 | 1149537 | 1063914 | | 1024474 | ... | 645105 | 626493 | 587621 | 595718 | 564640 | 571438 | -51 | | | |
| CO ₂ | 73066780 | 76861459 | 76785393 | | 75756495 | ... | 90024541 | 92895634 | 87752728 | 94379587 | 92973801 | 91946201 | 26 | | | |
| <i>thereof:</i> CO ₂ from fossil sources | 53379621 | 56657830 | 56393828 | | 55990229 | ... | 59832468 | 60655921 | 56512203 | 59695193 | 58312709 | 56035128 | 5 | | | |
| CO ₂ from biogenic sources | 11991079 | 12879485 | 12407994 | | 12136578 | ... | 20193163 | 21884356 | 22782664 | 25270402 | 24924212 | 26474742 | 121 | | | |
| CO ₂ from other sources | 7696080 | 7324145 | 7983572 | | 7629688 | ... | 9998910 | 10355358 | 8457861 | 9413991 | 9736880 | 9436331 | 23 | | | |
| N ₂ O | 20774 | 19673 | 19790 | | 20160 | ... | 17180 | 17840 | 16968 | 16197 | 16572 | 16385 | -21 | | | |
| NH ₃ | 69490 | 67525 | 67720 | | 68134 | ... | 62706 | 62144 | 62980 | 62744 | 61922 | 61886 | -11 | | | |
| PM _{2.5} | 22215 | . | . | | . | ... | 19896 | 20104 | 19096 | 19607 | 18885 | 18901 | -15 | | | |
| PM ₁₀ | 38004 | . | . | | . | ... | 35193 | 35922 | 34312 | 34897 | 34362 | 34280 | -10 | | | |
| Hazardous w astes | | tons | | | | 941.901 | 1.056.975 | 1.365.365 | 1.021.206 | 1.472.864 | | 1.065.885 | 3) | | | |
| Non-hazardous w astes | | | | | | | | 54.975.923 | | 33.409.745 | | 32.981.579 | 3) | | | |
| Environmental expenditure | Environmental protection expenditure ²⁾ | mio. € | | | 2083 | 2295 | ... | 4027 | 4229 | 4509 | 4770 | 4697 | 4624 | 122 | | |
| | <i>thereof:</i> Protection of ambient air and climate | | | | 505 | 509 | ... | 809 | 911 | 1058 | 969 | 808 | 803 | 59 | | |
| | Waste management | | | | 1577 | 1786 | ... | 3218 | 3317 | 3451 | 3802 | 3889 | 3821 | 142 | | |
| | Environmental taxes | mio. € | 4227 | 4392 | 4882 | 4928 | ... | 7272 | 7468 | 7354 | 7495 | 8113 | 8238 | 95 | | |
| | <i>thereof:</i> Energy taxes | | 2479 | 2592 | 3059 | 2986 | ... | 4453 | 4603 | 4456 | 4580 | 5004 | 5012 | 102 | | |
| | Transport taxes | | 1344 | 1379 | 1382 | 1477 | ... | 2197 | 2227 | 2251 | 2441 | 2556 | 2556 | 90 | | |
| Resource taxes | | 382 | 399 | 407 | 421 | ... | 549 | 574 | 590 | 603 | 615 | 617 | 61 | | | |
| Pollution taxes | | 21 | 21 | 33 | 44 | ... | 72 | 64 | 57 | 51 | 53 | 53 | 156 | | | |

S: STATISTICS AUSTRIA, Integrated NAMEA on behalf of BMLFUW, Environment Agency Austria. Compiled on 23 June 2015. – Calculations. – 1) Unless otherwise stated the change in 2012 refers to 1995; otherwise to the first/last reported year. – 2) Breaks in time series. – 3) The change is not given due to break in time series. – ". ." = evidence nonexistent or not possible due to objective reasons.

Datenbanken Tabellen Felder Suche

Werte

- Fakten
- Produktionswert (in Mio. €)
- Bruttowertschöpfung (in Mio. €)
- Erwerbstätige (in Mio. €)
- Materialeinsatz insgesamt (in 1.000 Tonnen)
- Inländische Entnahme fossiler Materialien (in 1.000 T...
- Importe fossiler Materialien (in 1.000 Tonnen)
- Inländische Entnahme von Biomasse ohne Holz (in 1.0...
- Inländische Entnahme von Holz (in 1.000 Tonnen)
- Importe von Biomasse ohne Holz und Holzprodukte (in...
- Importe von Holz und Holzprodukten (in 1.000 Tonnen)
- Inländische Entnahme von metallischen Mineralien (in...
- Inländische Entnahme von nicht metallischen Minerali...
- Importe von metallischen Mineralien in (1.000 Tonnen)
- Importe von nicht metallischen Mineralien (in 1.000 T...
- Energieeinsatz insgesamt (in Terajoule)
- Emissionsrelevante nicht erneuerbare Energieträger (i...
- Erdöl (in Terajoule)
- Emissionsrelevante erneuerbare Energieträger (in Ter...
- Nicht emissionsrelevante erneuerbare Energieträger (i...
- Sonstige nicht emissionsrelevante Energieträger (in T...
- SO2 (in Tonnen)
- NOx (in Tonnen)
- NMVOC (in Tonnen)
- CH4 (in Tonnen)
- CO (in Tonnen)
- CO2 insgesamt (in Tonnen)
- CO2 aus fossilen Quellen (in Tonnen)
- CO2 aus biogenen Quellen (in Tonnen)
- CO2 aus sonstigen Quellen (in Tonnen)
- N2O (in Tonnen)
- NH3 (in Tonnen)
- PM10 (in Tonnen)
- PM2.5 (in Tonnen)
- Gefährliche Abfälle (in Tonnen)
- Nicht gefährliche Abfälle (in Tonnen)
- Umweltschutzausgaben insgesamt (in Mio. €)
- Ausgaben für Luftreinhaltung und Klimaschutz (in Mio...
- Ausgaben für Abfallwirtschaft (in Mio. €)
- Ökosteuern insgesamt (in Mio. €)
- Energiesteuern (in Mio. €)
- Transportsteuern (in Mio. €)
- Ressourcensteuern (in Mio. €)
- Umweltschutzsteuern (in Mio. €)

Hinzufügen: Reihe Spalte

Name: Gruppe

Auto Übernehmen

TableVIEW ChartVIEW ColourVIEW

NAMEA ab 1995

Werte: Produktionswert (in Mio. €), Bruttowertschöpfung (in Mio. €), Erwerbstätige (in Mio. €), ... Schicht:

Felder: Werte nach Zeit Filter:

| Zeit | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--|----------------|----------------|---------------|----------------|----------------|----------------|
| Werte | | | | | | |
| Produktionswert (in Mio. €) | 494.492,15 | 508.243,09 | 482.843,41 | 490.919,56 | 511.269,65 | 517.911,46 |
| Bruttowertschöpfung (in Mio. €) | 238.705,33 | 242.638,92 | 232.318,03 | 236.678,91 | 244.471,05 | 250.680,99 |
| Erwerbstätige (in Mio. €) | 3.551.588,4 | 3.620.136,39 | 3.569.116,81 | 3.593.185,16 | 3.646.078,52 | 3.513.052,19 |
| Materialeinsatz insgesamt (in 1.000 Tonnen) | 270.473,74 | 256.108,3 | 238.487,59 | 243.388,87 | 254.351,75 | 250.672,85 |
| Energieeinsatz insgesamt (in Terajoule) | 1.945.435,6 | 2.017.505,62 | 1.944.094,1 | 2.027.599,46 | 2.012.880,68 | 2.031.183,17 |
| Gefährliche Abfälle (in Tonnen) | 1.056.974,6 | 1.365.364,63 | 1.084.463,22 | 1.472.864,23 | - | 1.065.884,55 |
| Nicht gefährliche Abfälle (in Tonnen) | - | 54.975.922,94 | - | 33.409.745,25 | - | 32.981.578,53 |
| Umweltschutzausgaben insgesamt (in Mio. €) | 4.027,3 | 2.631,14 | 4.615,34 | 4.770,26 | 4.697,24 | 4.626,73 |
| Ökosteuern insgesamt (in Mio. €) | 7.271,65 | 7.468,03 | 7.353,79 | 7.494,66 | 8.113,38 | 8.237,8 |
| Treibhausgase insgesamt (in Tonnen CO2-Äquivalenten) | 101.210.743,95 | 104.164.983,88 | 98.651.453,84 | 104.959.563,04 | 103.502.004,64 | 102.329.266,89 |

- Q: STATcube - Statistische Datenbank von STATISTIK AUSTRIA
- NAMEA ab 1995:

Gegenstand der Statistik:
Gegenstand der Statistik/Arbeit ist die tabellarische Darstellung ökonomischer und umweltbezogener Daten in einer der VGR ähnlichen Methode. Die ökonomischen Konten der österreichischen integrierten NAMEA umfassen den Produktionswert, die Bruttowertschöpfung und die Erwerbstätigen in Vollzeitäquivalenten. Die umweltbezogenen Daten setzen sich aus den Modulen Materialeinsatz, Energieeinsatz, Luftemissionen, Umweltschutzausgaben (für Luftreinhaltung und Klimaschutz sowie Abfallwirtschaft), Ökosteuern und Abfälle zusammen.

Rechtsgrundlage:
Nationale Ebene: Vertrag über die Lieferung von Daten im Bereich der Umwelt- und Energiestatistik (Vertragsnummer UW.1.4.18/0035-V/10/2007) abgeschlossen zwischen dem Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft (BMLFUW) und der Bundesanstalt Statistik Österreich.
EU-Ebene: Zum einen die Verordnung (EG) Nr. 2150/2002 des Europäischen Parlamentes und des Rates vom 25. November 2002 zur Abfallstatistik und zum

Tabelleninhalte löschen

- Analyses of decoupling effects, e.g.:
 - Economic growth and material input
 - Economic growth and air emissions
- Who causes environmental burdens and who bears the costs for the external effects?
- Composition and change over time of energy consumption and the effects on air emissions?
- Do investments in environmental protection activities have positive effects on the environment?
- Substitution of domestic extraction with imports and the effects on the environment (national and in the rest of the world)?
- ...

- Universities (teaching)
- Students
- Economic research institutes
- Eurostat (e.g. in the context of Air Emissions Accounts, Environmental Tax Statistics, Environmental Protection Expenditure Accounts, Material Flow Accounts, National Accounts)
- OECD (Environmental Protection Expenditure)
- Ministry of Agriculture, Forestry, Environment and Water Management (contracting authority)
- ...

Sustainable Development Goals

- 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
- 7.3 By 2030, double the global rate of improvement in energy efficiency
- 8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries
- 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
- 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programs on sustainable consumption and production, with developed countries taking the lead

Sustainable Development Goals

- 9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
- 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
- 12.2 By 2030, achieve the sustainable management and efficient use of natural resources
- 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

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The Austrian “integrated NAMEA”