

The unsustainable electronics tax

How it affects the environment, the consumer and the economy

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<https://elektronikbranschen.se/rapport-den-ohallbara-elektronikskatten/>

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Conclusions

The electronics tax, referred to in the legislation as a tax on chemicals in certain electronics, has proven to be unsustainable from a variety of perspectives.



The tax has no environmental benefit

The tax does not drive towards environmental objectives, but can instead lead to so-called false substitution, i.e. steering effects from substances with proven good properties to substances with unsuitable properties. The electronics tax also reduces incentives for reuse and shifts valuable resources from meaningful sustainability work to the administration of a non-purposeful tax without legitimacy.



Zero impact on production

From a manufacturer's perspective, Sweden is a very small market, accounting for only 0.7 per cent of the global market for consumer electronics. The electronics tax, which is national, has no effect on the production of global manufacturers as electronic goods are not produced specifically for the Swedish market.



Large price increases

In Sweden, the electronics tax drives up prices unnecessarily. In particular, this affects low-income households buying products in the lower price segments, where the share of the electronics tax is sometimes more than a third of the price. Companies and the public sector in need of IT products are also affected, as are large white goods buyers such as property developers and restaurants.



Purchases move abroad

In an increasingly globalised world, national policies primarily move purchases rather than direct consumer choice. This is particularly true in consumer electronics, as consumers are digital, price-sensitive and fast-moving across borders. Taxes increasingly drive consumers to buy abroad, with the risk of buying lower quality products that may be less environmentally friendly and energy efficient.



Reduced Swedish competitiveness

The electronics tax impairs Swedish competitiveness. Tax increases in 2023 have increased the tax burden by over SEK 1 billion on an annual basis, contrary to the stated intentions of the legislator.



Tax increase by 71% in two years

As a result of the deterioration of the deduction rules from July 2023 and the indexation of tax rates at the turn of the year 2022/2023 and 2023/2024, a tax increase of over 1 billion or 71% compared to 2022 is expected, contrary to the legislator's intention that the tax take should not increase.

Policy proposals to accelerate the phase-out of chemicals

The electronics industry, TechSverige, Teknikföretagen and Dataspelsbranschen believe that the tax should be abolished immediately in light of the many known problems with the electronics tax.

- Hazardous substances should be restricted or banned, but the legislative work needs to be continued by intensifying Sweden's and the government's work within the EU or at another international level, where it has a real effect and where the effects do not distort the market situation for consumers and companies.
- There are already established forms for international work, including within the framework of the EU Chemicals Strategy for Sustainability, the REACH Regulation, which concerns the production and safe use of chemicals, and the RoHS Directive, which bans or restricts the use of certain heavy metals and flame retardants in electrical and electronic products. Sweden should be an active and driving force in this work.
- Companies in the electronics sector are and will continue to be a strong force in phasing out hazardous substances and promoting the circular and resource-efficient use of electronic goods. However, this work needs to be encouraged, by improving rather than worsening the conditions for companies. Only then can businesses invest in meaningful sustainability efforts, process and product innovation, and increased knowledge sharing with consumers and other businesses.



What is the electronics tax?

The electronics tax, referred to in the legislation as the Tax on chemicals in certain electronics, is a targeted excise tax on electronic goods that has been in place in Sweden since 2017. The stated purpose of the tax is to reduce the introduction of hazardous substances into people's home environment by phasing out certain flame retardants in electronic products and incentivising companies to use safer alternatives.¹

Anyone who professionally manufactures, brings in, receives or imports taxable electronic goods is liable to pay the electronics tax. The taxable products are delimited by the CN code of the customs tariff and include the vast majority of electronic products - from cookers and washing machines to computers, mobile phones and televisions, but also products not intended for the home environment such as catering electronics.

The proposal for an electronics tax was developed within the framework of the Chemicals Tax Inquiry (SOU 2015:30). The inquiry justified the proposal for an electronics tax on the basis of possible risks of negative environmental and health effects, which were considered to be partly corrected by tax-induced price increases on electronic goods. The impact assessment in the report consists of a calculation of so-called "fictitious health benefits" - "fictitious" because there was no concrete research support at the time to put a value on health risks caused by the substances used in flame retardants. Instead, the report's health economic calculations were based on studies of substances with a similar chemical structure.²

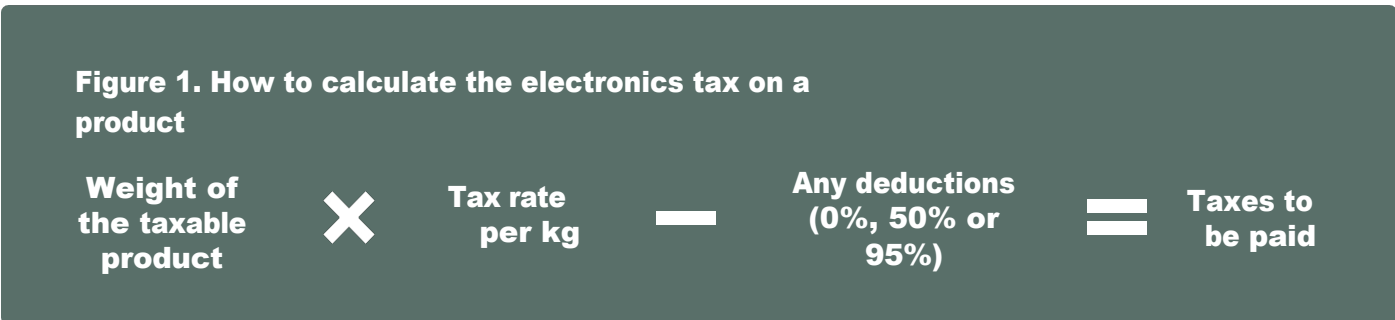
Tax based on weight - not chemical content

The collection of the electronics tax is not based on the chemical content of the products, but on the weight of the electronic goods. The current tax rates (for 2024) are SEK 12.02 per kilo for white goods and SEK 174.90 per kilo for other taxable goods. There is a ceiling for the tax of SEK 534.53 per item. For consumers, 25 per cent VAT is added on top of the tax. A deduction of 50 per cent of the electronics tax is allowed if the taxpayer can demonstrate that the product does not contain chlorine or bromine compounds. Furthermore, a 95 per cent deduction is granted if the taxpayer can also demonstrate that the product does not contain phosphorus compounds.

Since its introduction, the electronics tax has been severely criticised by authorities and the industry. A two-part evaluation by the Swedish Tax Agency and the Swedish Chemicals Agency showed that the tax was not appropriate from an environmental point of view, but instead gave rise to extensive administrative costs.³

Evaluations by HUI Research further show that the tax has distorted competition to the detriment of Swedish traders and led to between 800 and 2,000 job losses.⁴

Since the introduction of the electronics tax in 2017, the tax has been increased several times, despite serious criticism. A major increase of 38 per cent on white goods and 31 per cent on other electronics was implemented in 2019. Since then, the tax rates have also been updated with the consumer price index (CPI). In mid-2023, another change was made to the tax. The aim was to simplify the rules for deductions. Although the rule change was explicitly not intended to lead to an increased tax burden, this is exactly what has happened. As described in more detail later in the report, the tax take has increased by 71 per cent in 2023 and 2024 as a result of reduced deductions and consumer price index adjustments.



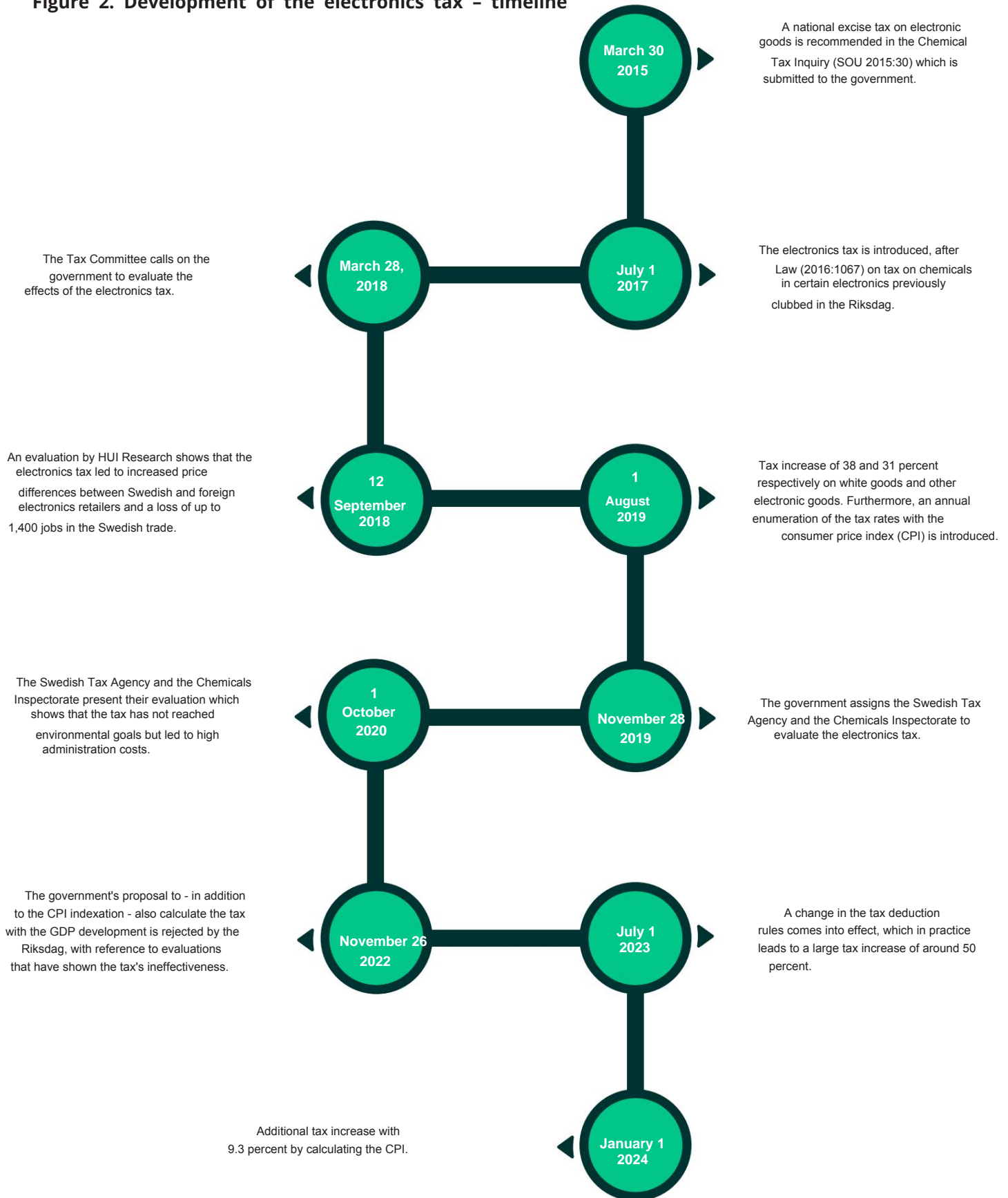
¹ Prop. 2016/17:1

² SOU 2015:30 p.133

³ Swedish Tax Agency & Chemicals Inspectorate (2020, 2021)

⁴ HUI Research (2018, 2019b)

Figure 2. Development of the electronics tax - timeline



The electronics industry - a cog in the modern economy

The electronics industry is an important cog in the modern economy. It provides consumers and businesses with electronic goods such as mobile phones, computers, televisions and appliances. These products enable smooth and secure communication between people, simplify their daily lives and create digital experiences that enhance their standard of living.

In addition to creating great value for consumers, the industry enables digitalisation, efficiency and growth for other parts of the economy. This applies to both the private and public sectors. According to Statistics Sweden, Swedish companies spend SEK 32 billion annually on the purchase and leasing of computer and telecommunications equipment⁵, which increases productivity in the economy, creates better working conditions and increases prosperity for citizens. In addition, the public sector procures electronics and white goods for SEK 7 billion.⁶

Companies in the electronics industry have an annual turnover of SEK 309 billion⁷, about the same amount as Swedish consumers spend on food. The value creation of the electronics industry is made possible by more than 46,000 employees in over 7,100 companies. Nine out of ten electronics companies are small businesses with less than ten employees. The industry also generates around SEK 26 billion for the national treasury. By comparison, this is enough to fund two-thirds of the Swedish Police Authority or almost the entire guaranteed pension for the lowest-income pensioners.

Six out of ten companies in the sector operate in the wholesale trade, which supplies other companies and the public sector with electronic products. Wholesale trade consists mainly of suppliers, distributors and importers. The remaining four out of ten electronics companies are in the retail trade, which mainly sells goods to consumers, in stores and online.

Figure 3. Electronics industry at a glance



309 billion SEK The turnover of the electronics industry - approximately as the turnover of grocery stores



46 150 persons Number of persons employed in the electronics sector



7 100 enterprises Number of enterprises in the electronics sector



SEK 26 billion Tax payments from VAT, payroll taxes, employers' contributions, corporation tax and electronics tax.



9 out of 10 companies Share of small enterprises in the sector, with less than 10 employees



47 per cent Proportion of retail sales of electronics made online

⁵ SCB, Business IT expenditure

⁶ Refers to contracted value within CPV codes 30, 32 and 397 according to the statistics of the Swedish Public Procurement Agency.

⁷ In 2021 according to Statistics Sweden, Business Economy. The electronics industry refers to companies in SNI codes 46.43, 46.5, 47.4, 47.54 and 47.914.

Over the past decade, the number of employees in the wholesale trade sector has remained almost constant, while the number of employees in the retail trade sector has decreased slightly. The electronics tax, which was introduced in 2017, has contributed to the decline in the retail sector, but the decline is mainly due to a rapid structural change where stores have become fewer as a result of growing

e-commerce and international competition. Between 2010 and 2022, e-commerce's share of consumer electronics sales increased from 12 per cent to 47 per cent.⁸ Electronics goods are homogeneous, product standards are global and price comparisons are easier than ever. As a result, consumers are more mobile than before and one in eight e-commerce purchases are made on foreign sites.⁹

Swedish incentives have no effect on global manufacturers

The manufacturers of consumer electronics are global players such as Apple, Samsung, HP, Lenovo, Dell, LG and Philips. For these types of players, Sweden represents a negligible share of the market. Sweden's share of the global consumer electronics market is approximately 0.7 per cent, which means that the manufacture of electronics products is not governed by the behaviour of Swedish consumers.¹⁰ National policy instruments such as the electronics tax therefore affect

does not affect the manufacturing process, but does affect the competitiveness of domestic retailers.¹¹ Margins in the electronics industry are already low, especially in online retailing. More than a quarter of companies are loss-making, which means that the additional costs of the electronics tax hit Swedish companies hard and sharply increase prices for consumers.

National policies such as the electronics tax therefore do not affect the manufacturing process, but do affect the competitiveness of domestic traders - HUI Research¹¹.

Table 1. Operating margins in the electronics trade²⁰²²¹²

	Type of company in the sector (median value)	Lower quartile (a quarter of firms have a lower margin)
Consumer electronics trade with shops	4,3%	-0,4%
E-commerce in consumer electronics	1,5%	-18,1%
Wholesale of electronics	4,9%	-0,2%

⁸ Postnord and HUI Research (2024)

⁹ Postnord, Svensk Digital Handel and HUI Research (2019).

¹⁰ Data on the global share comes from Grand View Research, Handelsfakta.se and own calculations.

¹¹ HUI Research (2019a)

¹² The table is based on data from Statistics Sweden, Business Economics. To obtain the reported values, the data has been weighted based on industry turnover and operating margins at the five-digit SNI code level.

The electronics tax is counterproductive for the environment

The manufacturers work actively with sustainability issues. The work includes the phasing out of hazardous substances in products and a large number of hazardous substances have been phased out by international legislation at EU level such as REACH and RoHS.¹³ The work also involves large investments in collection systems for reuse, recycling and dissemination of knowledge via, among other things, EI-kretsen.se. These are other tools to greatly limit the spread of chemicals. Sweden is at the top of the world regarding the collection and recycling of electrical products: 71 percent of all home electronics materials are recycled or reused and a further 26 percent are taken care of through energy recovery. Some electronics

taken out of use as a result of it containing substances that should not remain in circulation, such as mercury. ¹⁴

The problem with the electronics tax is that it overturns rather than supports the electronics companies' efforts to reduce the presence of hazardous substances and promote a circular and resource-efficient use of electronic goods. This happens because the companies have to spend very large resources on the administration of a tax that does not drive favorable substitution (that is, replacement of more dangerous with less dangerous subjects) but which instead take focus and resources from meaningful sustainability work.

Flame retardants reduce the risk of fire

The stated main purpose of the electronics tax was to reduce the supply of hazardous substances in the home environment by replacing certain types of chemicals which, among other things, are found in flame retardants. Flame retardants fulfill an important function from a safety point of view. If a fault occurs in the product, the flame retardants

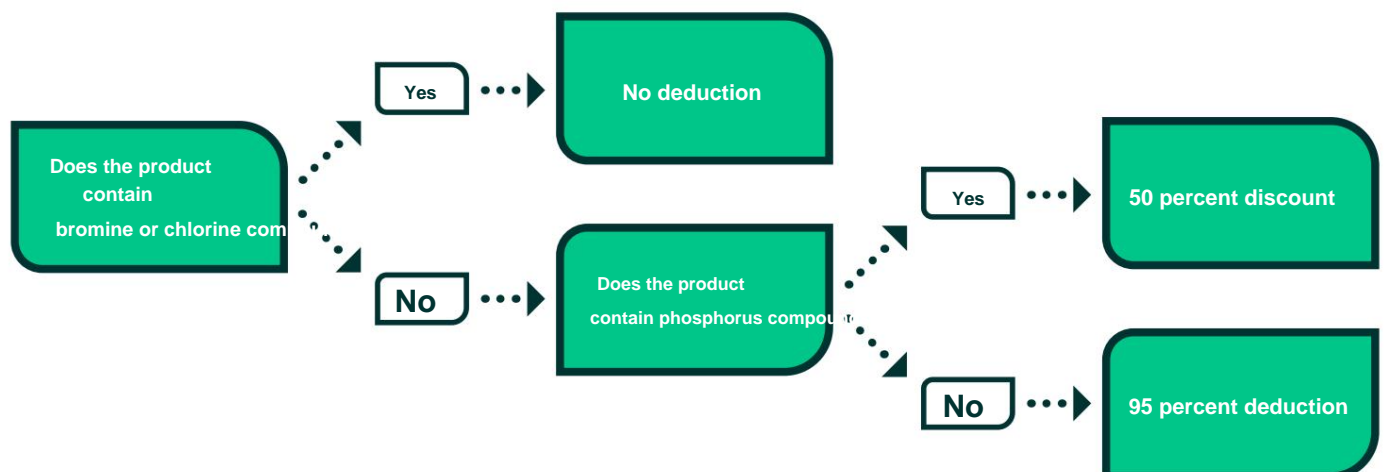
function to stop or delay the progress of the fire. Although it is important to phase out substances with negative environmental or health properties, this must not be done by legislation undermining the possibilities of using fire-proof and effective flame retardants, as this would increase the risk of fire in domestic environments.

High risk that the tax will increase the occurrence of hazardous substances

The legislator's express ambition has been to steer the use away from more dangerous to less dangerous flame retardants through a system of different percentage deduction levels in relation to the starting level of the tax, which is defined as the weight of the product multiplied by the tax rate per kilo. If the companies can

prove that the goods do not contain chlorine or bromine compounds, a deduction from the starting level of 50 percent is allowed. If the companies can also demonstrate that the goods do not contain phosphorus compounds, a deduction of 95 percent is allowed.

Figure 4. Schematic view of the current deduction structure of the electronics tax



¹³ REACH is an EU regulation on the production and safe use of chemicals. RoHS is an EU directive that prohibits or restricts the use of certain heavy metals and flame retardants in electrical and electronic products.

¹⁴ Source: EI-Kretsen.se, email reconciliation 2024-02-22

A very serious problem is that current legislation allows a maximum tax deduction for all alternative flame retardants (those that do not contain bromine, chlorine or phosphorus). Close to ten of these have been shown by independent experts to have serious negative properties. 15 The consequence is a very high risk of so-called "false substitution", i.e. control effects from substances with proven good properties to substances with unsuitable properties, as the use of the latter gives higher deductions. As there are further missing standardized measurement methods for market control regarding mainly those alternative flame retardants (those that do not contain chlorine, bromine and phosphorus) the risk is obvious that they are not serious

operators make maximum tax deductions, because the risk of detection of which flame retardant is actually used is minimal. This goes against the purpose of the legislation and seriously distorts competition the market.

Good flame retardants are thus taxed at the same time that substances with dubious, sometimes documented unsuitable environmental and health properties, can receive a maximum tax deduction. The risk of false substitution is, in accordance with Table 2, in practice much higher for the electronics tax than for other policy instruments aimed at restricting or phasing out chemicals.

Table 2. Different control instruments' logic in relation to the phasing out of chemicals¹⁶

Control means	Prohibition/taxation is based on the inherent dangerous properties of individual substances	There is a positive list with recommended alternatives	Risk of false substitution
EU's REACH regulation	Yes	No	High
EU RoHS Directive	Yes	No	High
EU criteria for public procurement (GPP) (a)	Yes	No	High
EU Ecolabel (a)	Yes	No	High
Nordic Ecolabel (a)	Yes	No	High
TCO environmental label (a)	Yes	Yes	Very low
The chemical tax (b) (c)	No (f)	No. Gives maximum tax discount for all alternatives (d) flame retardant	Very high (e)

(a) Does not permit or (b) taxes brominated and chlorinated flame retardants.

(c) Also taxes all phosphorus-based flame retardants.

(d) Alternative flame retardants are those which contain neither bromine, chlorine nor phosphorus.

(e) This as a maximum tax discount is also allowed for documented dangerous, alternative flame retardants (d).

(f) All substances within the following groups are affected: bromine, chlorine, phosphorus and alternative (d).

¹⁵ For example ToxServices in the USA.

¹⁶ The table is based on classifications in accordance with Almega (2019).

TCO certification – environmental labeling of IT products

TCO labeling is an international sustainability certification of IT products. There are currently approximately 2,500 TCO-certified products (including monitors and computers), which are the most environmentally friendly products on the market in terms of flame retardants. Through the design of the electronics tax, these products are also taxed, which is counterproductive.

In addition to the fact that TCO-certified products may not contain brominated and chlorinated flame retardants, since 2015 they may only contain substances listed on a special positive list: [TCO Certified Accepted Substance List — safer alternatives to hazardous](#). This list contains 18 phosphorus-based and eight alternative (d) flame retardants, all carefully examined by independent US expert bodies.

Costly administration to no avail

In order to make a deduction, the companies must be able to prove that the substances that the legislation intends to limit do not occur. All in all, this burden of proof means very costly administrative work. The evaluations by the Chemicals Inspectorate and the Swedish Tax Agency have shown that the tax did not lead to favorable substitution, but that it instead created extensive and costly administration for both companies and authorities.

The Economic Institute warned, among other things, that the social economic costs of the electronics tax were underestimated in connection with the introduction.¹⁷

Until July 2023, a distinction was made between so-called additively and reactively added compounds, where reactive

added associations gave higher opportunities for deductions. This proved wrong as additively added compounds do not have worse intrinsic health or environmental properties than reactively added compounds. It also led to complicated and time-consuming work for the companies to make the correct tax calculations and deductions. There was also a risk that unscrupulous actors made maximum tax deductions, as the risk of detection was non-existent. In the evaluation by the Swedish Tax Agency and the Chemicals Inspectorate, it was found that companies paid the full tax

instead of claiming deductions, because of the administrative costs.¹⁸

The tax change 2023 - ineffective tax got even worse

Through the latest amendment to the law on July 1, 2023, the government tried to simplify and correct parts of the problems, but the result was even worse. The companies are now not allowed longer maximum deduction when using reactively added phosphorus compounds, which in practice means that very few products receive a maximum deduction of 95 percent. The state of knowledge is deficient regarding the risks of many so-called alternative flame retardants that either contain bromine, chlorine or phosphorus.¹⁹

The average deductions have therefore fallen from an average of 45 percent before the turn of the year 2023, to only 10 percent after the rule change. For white goods, there are practically no deductions at all.

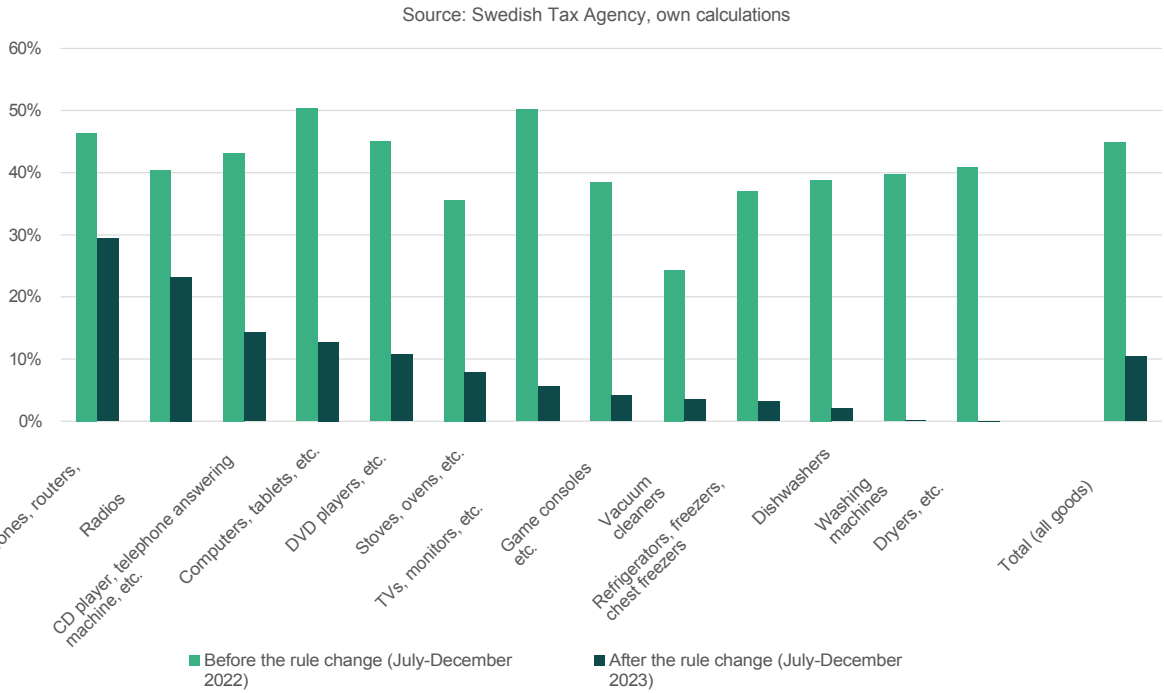
Today's electronics tax means that even products that are completely free of flame retardants with chlorine, bromine and phosphorus compounds are taxed, as deductions are only allowed up to 95 percent. The design means that electronics companies - and by extension consumers - are imposed an excise tax that they cannot avoid even if they act in a way that according to the legislation is exemplary and optimal. Such a construction is illegitimate in relation to economic principles regarding the design of environmental taxes. Substances that do not exist in the products at all cannot possibly cause environmental or health risks. They may therefore not be taxed within the framework of a policy instrument that claims to be an environmental tax.

¹⁷ Norwegian Institute of Economics (2015)

¹⁸ Tax Agency & Chemicals Inspectorate (2020)

¹⁹ Tax Agency & Chemicals Inspectorate (2021)

Graph 1. Average deductions before and after the rule change in 2023/20.



Reduced incentives for reuse

Another unfortunate effect of the electronics tax is that it discourages reuse incentives, contrary to the work of many electronics companies as intermediaries between users of new and used products. The electronics tax is levied on imported reused products, restricting mobility and reducing the opportunity for reuse consumption within the EU.

There is a strong and growing interest from consumers, businesses and the public sector to buy second-hand electronics, but the inflow from the domestic market is not sufficient to meet the demand. The tax on imported electronic goods makes second-hand goods less attractive compared to new goods, as the tax is higher in relation to the price. One consequence is that customers avoid buying second-hand IT equipment if the volume demanded requires imports from other countries.²¹

²⁰ The product categories that are taxed are defined according to the CN code of the customs tariff. See the Swedish [Tax Agency's overview](#) for examples of different input products at category level.

²¹ TechSverige (2022b), Confederation of Swedish Enterprise (2022)

Large price increases hit Low-income households hardest

The electronics tax has led to sharp price increases on electronics and white goods, in many cases by between 20 and 25 per cent. The price effects are broad, but hit hardest on goods with a high weight in relation to sales prices, as the tax is weight-based.

The impact of the price increases caused by the electronics tax is thus against high weight electronics products in the slightly lower price segments. In practice, this means that the electronics tax is regressive. It hits hardest on the normal supply of consumer electronics for low-income households. This distributional effect with a bias towards low-income households is most evident in tough economic times.

As a result of falling real wages and high inflation, the eroding purchasing power of households has hit the home electronics segment very hard in 2022 and 2023. At the same time as demand has fallen and costs for purchases and rents have skyrocketed, the electronics tax has increased sharply. This has been inflationary. In addition to hitting households, the price increases affect businesses and the public sector, which have a great need to invest in computers and other IT equipment. Another group that is particularly hard hit by the electronics tax is housing developers and catering operations such as restaurants, as they are major buyers of white goods.

Figure 5. Impact of the electronics tax on different types of actors



Broad price increases due to the electronics tax

When the electronics tax was introduced in mid-2017, it immediately had a broad impact on retail prices. The major electronics chains confirmed in the media that they would be forced to raise prices significantly, often by the maximum amount of the tax plus VAT. There was talk of particularly problematic effects on white goods, monitors, computers and televisions.²²

For example, a standard Cylinda washing machine, which costs SEK 4,990 in the shops, has a

tax rate of 13.3 per cent. The product is SEK 668 more expensive for the consumer and should have cost around SEK 4 300 in the absence of the electronics tax. For a computer monitor from Samsung that costs SEK 2,844 in the trade, almost a quarter of the tax (23.5 per cent) consists of tax. The product would probably have cost around SEK 2,200 without the electronics tax. More product examples are shown in Figure 6. In some cases, the electronics tax including the VAT surcharge constitutes more than a third of the consumer price.

²² See for example Hesserud Persson (2017) in Aftonbladet.

The norm in consumer electronics is that prices go down as technology advances. However, in August 2017, 70% of electronics retailers responded that they had increased their prices in the past year.

in the last three-month period. This compares to an average share of 7 per cent in the 12 months prior to the introduction of the tax.

Graph 2. Broad price increases following the introduction of the electronics tax²³



HUI Research found that after the introduction of the electronics tax, Swedish prices for home electronics increased by six percentage points compared to prices for home electronics purchased via foreign e-commerce sites.²⁴ This supports the view that consumers shifted their consumption to goods sold abroad, which is also supported by the Chemical Tax Inquiry.

(SOU 2015:30) predicted. Since then, the electronics tax has been raised several times. As e-commerce blurs borders, national policy instruments increasingly affect where purchases are made, rather than that they are made. This effect will only increase over time, as cross-border trade matures.

Lack of control favours rogue foreign operators

The legislation has in fact been adjusted afterwards so that foreign operators are now also formally obliged to pay electronics tax when selling to Swedish consumers. Most foreign market players are of course legitimate, but it is inevitable that the electronics tax, which is basically a national policy instrument, disadvantages Swedish traders and creates incentives for rogue foreign players to gain a competitive advantage on the Swedish market. In 2022, only 0.8 per cent of the tax revenue came from foreign actors, despite the fact that one in eight e-commerce purchases of consumer electronics are made from foreign sites and that almost half of consumer electronics trade takes place online.²⁵ Authorities' control of compliance with the tax is inadequate.

basically a desk-top construct. In view of this fact and the complexity of the tax, it is probably neither technically nor economically feasible to implement a control system that can ensure compliance by international operators.

The distortionary effect of the tax includes not only price increases by Swedish electronics retailers and an increased risk of rogue traders. It also includes fewer consumer options, as fewer products can bear their own costs. Furthermore, it creates incentives for consumers to buy goods of poorer quality, which may include products that are less environmentally friendly and energy efficient.

²³ National Institute of Economic Research

²⁴ HUI Research (2018)

²⁵ APPLiA (2023)

Figure 6. Price increases due to the electronics tax - product example



Monitor: Samsung S27B610 27".

- Lowest Price in Sweden (1/3 2024) according to Prisjakt: 2 844 kr.
- Tax 535 + VAT 133 = €668.
- Tax rate: 23.5%.
- Possible price without electronics tax = €2,176.



Laptop: Dell Vostro 3520 3RN2G 15.6" i5-1235U 16GB RAM 512GB SSD

- Lowest price in Sweden (1/3 2024) according to Prisjakt: 5 879 kr.
- Tax 320 + VAT 80 kr. = 400 kr.
- Tax rate: 6.8 per cent
- Possible price without electronics tax = €5,479.



Washing machine: Cylinda 3464D

- Lowest price in Sweden (1/3 2024) according to Prisjakt: SEK 4,990.
- Tax 535 + VAT 133 = €668.
- Tax share: 13.3 per cent
- Possible price without electronics tax = €4,322.



Game console: PlayStation 5 (slim 1TB)

- Lowest Price in Sweden (1/3 2024) according to Prisjakt: 6 299 SEK.
- Tax 535 + VAT 133 = €668.
- Tax rate: 10.6%.
- Possible price without electronics tax = €5,631.



TV: LG 55UR7300 55" 4K LED

- Lowest price in Sweden (1/3 2024) according to Prisjakt: 6 290 SEK.
- Tax: 535 + 133 = 668 kr.
- Tax rate: 10.6%.
- Possible price without electronics tax = €5,622.

Tax increase by 71 per cent in two years

Before the change in the deduction rules in 2023, the electronics tax generated just over SEK 1.6 billion for the treasury on an annual basis (in 2022). Between 2017 and 2022, tax revenues were in all years lower than what had been budgeted for in the state budget, with an average overestimation effect of 17 per cent. 2023 was a break in the trend in this respect as the tax levy increased sharply and abruptly from mid-year.²⁶

As a result of the deterioration of the deduction rules from July 2023 and the indexation of the tax rates at the turn of the year 2022/2023 (by around 9 per cent) and 2023/2024 (by 9.3 per cent), the tax take from the electronics tax in 2024 is expected to be more than 2.7 per cent.

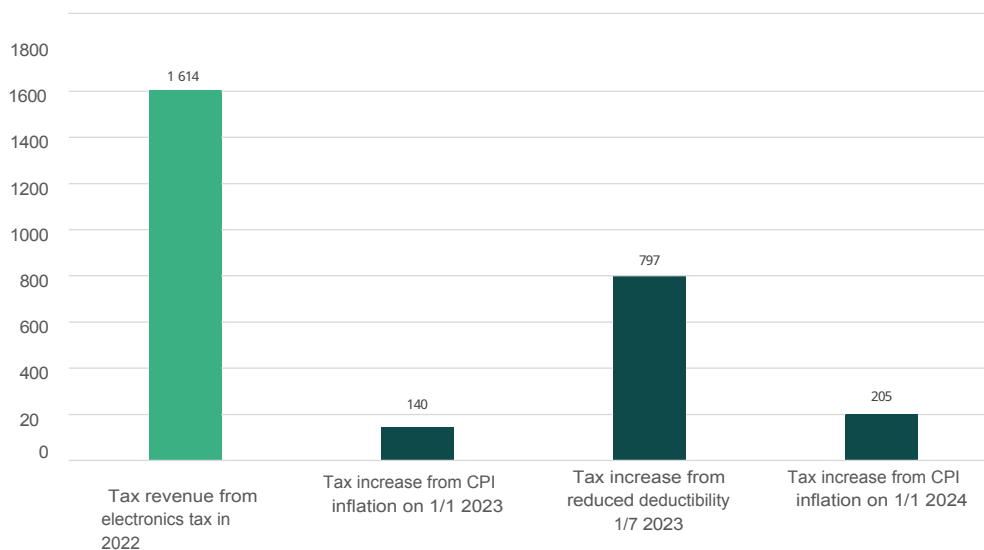
billion kronor. This is a tax increase of more than one billion or 71 per cent compared to 2022, contrary to the legislator's intentions that the tax take should not increase.²⁷

At the time of writing, the new deduction framework has been applied for just over six months and data is available for the period July to December 2023. Compared to the corresponding months in 2022, the starting level of the tax decreased by 12 per cent, as electronics sales fell due to the recession. However, the actual tax take increased by 44 per cent despite the shrinkage of the tax base (sales and initial tax level).

Figure 3. The increases in the electronics tax in 2023 and

202428

Refers to millions of SEK and full-year effects.



Total tax increase: SEK 1 142 million. (71%)

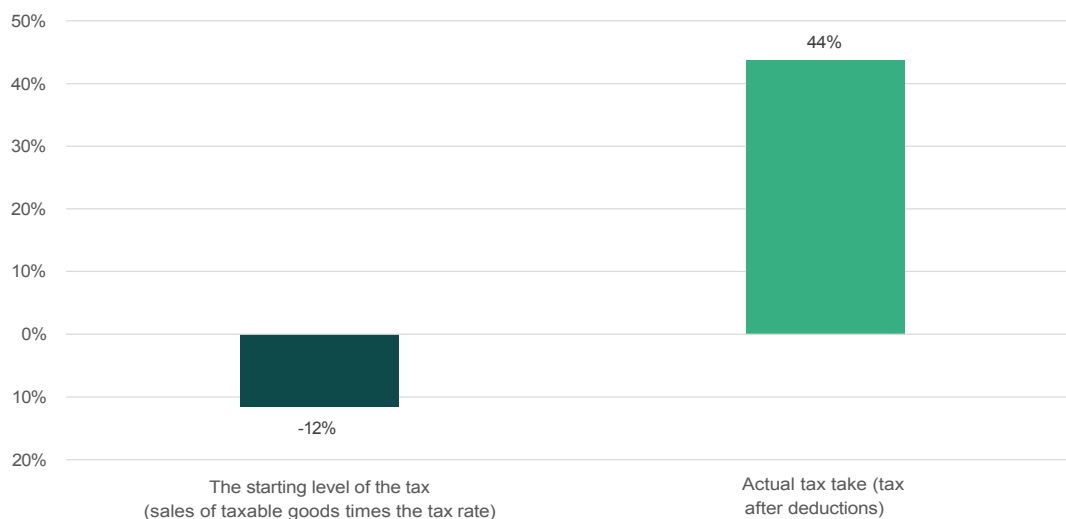
²⁶ According to data from the National Financial Management Authority and own calculations.

²⁷ Prop. 2022/23:1

²⁸ Tax authorities and own calculations

Graph 4. Effects of lost deductions: increased tax collection despite falling sales²⁹

Change July-December 2023 compared to the same period in 2022



Net effect on government finances - a fraction of the budgetary effect

It is worth noting that the net effect of the tax on government finances is significantly less than the direct tax revenue in the government budget. The net effect takes into account the loss of VAT revenues, payroll taxes and employer contributions that occur as a result of the tax base decreasing when prices rise. It also takes into account increased administrative costs for the Swedish Tax Agency, Swedish Customs and the Chemicals Inspectorate.

In 2018, HUI Research evaluated the net effect of the newly introduced tax. It was then estimated to be in a range between minus SEK 369 million and plus SEK 100 million.

559 million.³⁰ In other words, it could not be determined whether the net effect on government finances had been positive or negative. In a follow-up report after the tax increase in 2019, HUI Research gave a point estimate of the net effect of SEK 270 million.³¹ The net effect of the tax on government finances is thus much smaller than the outcome according to the state budget, perhaps around one tenth of the direct budget outcome. Given the harmful effects on the economy, consumers and sustainability work in the industry, this is expensive revenue that cannot justify the tax from a purely fiscal perspective.

²⁹ Tax authorities and own calculations

³⁰ HUI Research (2018)

³¹ HUI Research (2019b)

Researcher interview: Mattias Lindahl



Mattias Lindahl is a professor in product-related environmental work at the Division of Industrial and Environmental Engineering, at Linköping University. He teaches and researches in circular economy, ecodesign and product service systems.

Mr Lindahl is also a board member of the Swedish Institute for Standards and in 2022 he was appointed as a delegate to the Circular Economy Delegation.

How do you think the electronics tax works?

I see a couple of challenges. First, the tax is counterproductive in that customers tend to choose cheaper, less sustainable and environmentally friendly products due to the increased cost of the tax, which goes against the original objective as I interpreted it, to promote the purchase of more sustainable and environmentally friendly alternatives.

Furthermore, the tax is an obstacle for companies that focus on remanufacturing electronic products, which undermines efforts for a more sustainable use of electronics in our society, one that ensures that we use manufactured products for longer. It makes it more difficult

even for poorer customers to buy good second-hand products.

Finally, the basic assumption that the tax would make electronics companies change their products is not reached in this way. The Swedish market is too small to be a significant driver for global manufacturers. Promoting a tax at EU level would be a more effective option, together with legislation that promotes longer lifespan and lower life cycle costs of products. The latter can be driven by public procurement here in Sweden.

Why do you think politicians are tempted to introduce this type of tax?

It is indeed a good question. I think the problem was the attraction of the apparent simplicity of the tax and the consensus among politicians. It sounded good, which also meant that it never happened.

debate and analyse the potential negative effects of the tax. This approach is also likely to reflect a well-intentioned desire to demonstrate rapid action and commitment to environmental and sustainability issues.

What do you think politicians should do instead?

Policymakers should focus on measures that have a real and measurable positive impact on the environment and the sustainability of products. More impact assessment would be desirable, including an expanded systems perspective that more clearly analyses surrounding effects that may not be desirable. This also includes focusing more on pushing for the implementation of policies and regulations at least at

EU level to ensure that the measures that are being pursued have sufficient impact. Examples of such measures could be legislation requiring suppliers to report the planned lifespan and life cycle cost of their products, and for public procurement to prioritise purchases based on these criteria to promote more circular and sustainable development.

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How it affects the environment, the consumer and the economy

March 2024