Mitigating negative Effects of
Overtourism on the Local Population:

The Tourist Solidarity Levy

(incl. Example for Calvià, Mallorca, Spain)

Concept Paper (Patrick Koch, November 2025)

Management Summary

This concept proposes a small additional solidarity levy to tackle the negative social and economic impact on the local population caused by overtourism. A daily amount per tourist is charged, in addition to existing tourist taxes or fees. The money is directly redistributed to local residents to use in local shops, restaurants, bars and other local businesses.

The redistribution and local payment process is handled by the stadtguthaben®-system, a QR code-based, unregulated* and closed payment network for cities and regions. It is easy to implement, cost-effective, transparent, and is managed by the city or region itself.

The approach mitigates price distortions and supports residents with their everyday spendings, and strengthens the region's small and midsized businesses by keeping the funds within the local economy. Municipalities can demonstrate actual action against overtourism effects on the local population.

** The model operates under the Local Network Exemption (LNE) of the Payment Service Directive 2 of the EU.*

1. Initial Situation

Problems for Local Population Resulting from Overtourism

The negative effects of overtourism are becoming increasingly widespread in many touristic destinations. Massive price increases and competition for goods and services resulting from tourist consumption (lodging, restaurants, bars, groceries, etc.) disadvantaging local residents through higher costs of living.

At the same time the local population does not benefit accordingly from tourism revenues, as the vast majority ends up with international tourism corporations. Existing tourist taxes mainly serve environmental or sustainability purposes, not social redistribution.

Objective: *a dedicated mechanism ensuring that part of the tourism surplus is used to directly support local residents in their everyday spendings.*

2. Solution Approach

A Tourist Solidarity Levy Which is Re-Distributed to Residents

The proposed solution introduces an additional, dedicated solidarity levy (1 – 3 EUR per day) paid by tourists and directly redistributed to local residents. The levy will be collected together with existing tourism taxes by hotels, holiday apartments, etc. and goes to a dedicated local fund. The re-distribution of the money to the residents as well as the payment process in local shops and restaurants is operated via **the local payment system of stadtguthaben®**. A closed economic cycle for local economic strengthening is created.

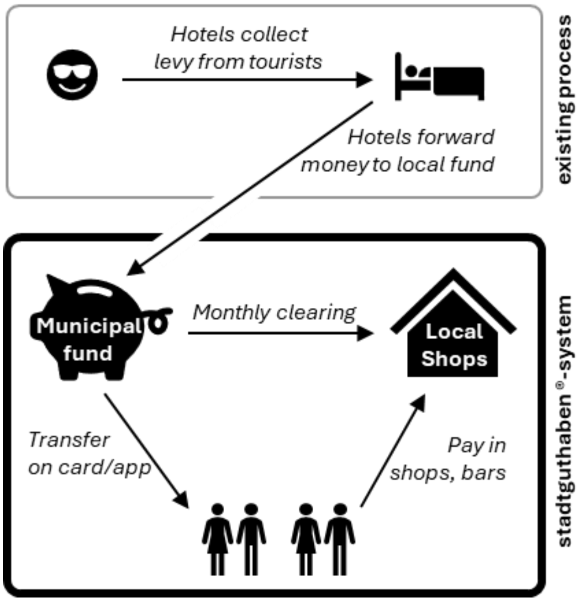
The levy is both socially and economically justified. The concept follows the **Polluter Pays**-Principle**.** Tourists benefit from infrastructure and local culture but cause the price effects and even additional wear. Residents suffer these negative externalities and in consequence a substantially reduced quality of life but right now don't participate from touristic benefits. Today primarily hoteliers and hospitality businesses gain from tourism benefit. The re-distribution concept brings a social justice-effect.

Technical Implementation

The technical implementation of the **stadtguthaben®-system** – Germany's leading municipal digital payment platform – is fast, easy and transparent. It is a QR-code based prepaid payment network without external payment providers and financial regulation involved. That makes the infrastructure highly cost-effective and gives the operator (= municipality/region) full sovereignty.

The beneficiaries (= local population) use either a mobile app or a physical prepaid card, on which they get the money transferred. The acceptance partners charge from the cards/apps via app (smartphone or tablet) and/or a webbrowser portal. Eligible participants can be all kind of restaurants, cafes, bars, bakeries, butchers, local markets, grocery stores, local supermarkets, pharmacies, drug stores and even service providers (hairdressers, craftsmen, etc.) and cultural institutions. The main criteria for acceptance points are, that they are located in the participating municipality and have a direct contract with the operator/issuer (= municipality). The operator has a comprehensive and detailed, browser-based administration backend to manage, operate and evaluate the whole infrastructure.

Workflow:



1. **Collection:** The levy is collected by accommodations (hotels, holiday apartments, etc.) and transferred to the municipality.
2. **Verification:** Recipients register with a residence certificate.
   Variation: only socially disadvantaged households are eligible.
3. **Payout:** Municipality loads monthly amount to citizens' accounts. This can be done either automatically by the system, as a bulk transfer (e.g. via excel) and/or manually by the operator.
4. **Payment:** Residents pay with their app/card at participating stores. Therefore the store scans the QR code, sees the remaining credit and deducts the precise amount from the citizens' account (at this point, no real money is transferred).
   Variation: To encourage fast spendings the redemption window of the unused credit might even expire after a certain time.
5. **Clearing:** After every month, the system provides the operator with a standardized SEPA-payout file. It includes the sum of the accepted monthly payments of every participating store. With these files the operator initiates the money transfer.
   Important: all money involved is in the local bank account of the operator!

Advantages:

- No credit card/bank account needed (includes people without bank accounts)
- Low transaction costs as no payment provider schemes like VISA or mastercard and issuing banks are involved
- Transparent use of funds (including digital record)
- Scalable for any participant number

Regulatory Framework

The model described is a payment service. In the EU the **Payment Services Directive (PSD2)** regulates such payment services and puts them under supervision. However, it allows certain exemptions. One of the exemptions is the **Limited Network Exemption (LNE)** under Article 3(k).

The LNE applies to payment instruments usable only within a restricted network (e.g. a city or region). It ensures that such closed-loop systems are not treated as general payment services under PSD2 and hence, are not subject to supervision by the national financial supervision. The defined criteria for this exemption within the PSD2 together with the EBA Guidelines (EBA/GL/2022/02) include:

- Necessity of direct contract between issuer (municipality) and each acceptance point.
- Limited number of acceptance points (can be up to several hundred)
- All acceptance points must use a common trademark/brand for the payment instrument
- The instrument must be usable only within a specific geographic network
- Notification Duty and Thresholds (if over 1 million EUR of total payments)

The directive has been transposed into local law by the member states. Most countries sticked very closely to the EU criteria. With the stadtguthaben®-system all criteria für a limited network exemption are met, so that cities and municipalities can issue this kind of local payment system without supervision.

Summary

The proposed solidarity model offers an innovative, socially just, and technologically mature approach to tackle the challenges of overtourism. It has social and financial impact and is based on an easy-to-manage and proven software system.

Stadtguthaben GmbH

The Stadtguthaben GmbH provides the leading local payment system, that operates without financial supervision requirements under the Local Network Exemption. Stadtguthaben services approx. 200 cities and regions in Germany like Essen, Bielefeld, Augsburg, Erfurt and many more.

3. Example Calculation

3.1 Mallorca, Spain

The Balearic Islands are an extreme example. In 2025 they welcome over 19 million tourists, of which 13.5 million will be on Mallorca alone, compared to just 967,000 residents. This means a ratio of 14 tourists for every resident. On peak summer days, up to 1.9 million people are present on the Balearic Islands simultaneously, pushing local infrastructure to its absolute limits. (source). The average touristic stay is 5.76 days, resulting in approximately 77.8 million total tourist-days per year.

The strong tourist demand leads to significant price distortions that disproportionately burden locals. It affects especially the real estate pricing and the general cost of living (restaurants, groceries, etc.). Restaurants in tourist areas charge 20-40% higher prices than comparable establishments in local neighbourhoods. One in five Balearic residents is at risk of poverty, despite tourism generating over 22 billion EUR in 2024 (source). Mass protests have become frequent since 2024. In March 2024, up to 50,000 people marched in Palma at the rally "Less tourism, more life". (source)

The Balearic Islands have levied a sustainability tax ("Ecotasa") since 2016, ranging from 1-4 EUR per person per night, depending on accommodation. But the revenues fund environmental projects and infrastructure, but not direct relief for local residents.(source)

3.2 Business Case for Calvià

Calvià is a region at the southwest coast between Palma and Port d'Andratx, covering places like Magaluf, Santa Ponça, Peguera. It is Spain's second largest tourist destination with 1.7 million annual visitors and only 51.000 residents and therefore strongly affected. The ratio exceeds 33 tourists per resident.

Financial Calculation

(Please note: the financial calculation is a rough guide to illustrate the logic and idea behind it. It can be transferred to any given touristic region with individual numbers)

- The Calvià region welcomes 1.7 million tourists per year. The average stay is 5.8 days. That results in approx. **10 million tourist-days/year**.
- In a moderate scenario with a levy of **2 EUR/day** the **annual amount is 20 million EUR**.
- Of 51.000 residents in the region, we assume 50% eligible (e.g., households with permanent residence and lower income) and/or interested = **25.000 people**
- The annual amount of financial support per person is 20 million EUR : 25,000 people = **800 EUR per person and year**.

Tourist Impact

For a 6-day stay with a levy of 2 EUR/day, the added cost are 12 EUR. Assuming an average daily tourist spend of 225 EUR (source), the total spend for 6 days is approx.1,350 EUR. The average cost increase for one tourist equals **0.89%** and therefore is negligible in relation to total cost.

Benefits

Several benefits arise from the concept:

- Direct **financial benefit per person** of 800 EUR per year. Assuming that mostly people with a low household income will use (or are directly addressed by) the offer, it has a noticeable effect on their financial situation.
- Direct **financial benefit for the local economy** through the closed economic loop. This not only supports the businesses directly and with a steady off-season demand but has also positive effects on local taxes and jobs. Therefore it might even make sense to not just sponsor the amount but use the fund to top up a prepaid amount of residents, e.g. pay 50 EUR per month and get 100 EUR loaded.
- The **psychological effect** of acknowledging the burden for the residents from overtourism is important for municipalities. It shows actual action against the problem.

3.3 Regulatory Framework in Spain

The EU's Payment Services Directive (PSD2, Directive 2015/2366) was implemented in Spain via:

- **Real Decreto-ley 19/2018** of 23 November 2018 (source)
- **Real Decreto 736/2019** of 20 December 2019 (source)

These have been fully in effect since late 2018. (source) The central criteria for the Limited Network Exemption ("Red Limitada") in Spain are:

- **Direct Contracts** between issuer (municipality) and each acceptance point (shop, restaurant).
- **Limited Number of Acceptance points.** EBA guidelines define no fixed number, but require "limited usability." For Calvià, 200–500 points should be EU-compliant.
- **Shared Branding**, all acceptance points must use a common trademark/brand ("Calvià Solidaritat" logo, for example).
- **Local Restriction**, meaning the instrument must be usable only within a specific geographic network. Limiting use to Calvià is sufficent.

Notification Duty and Thresholds: Article 37(2) PSD2/6 RDL 19/2018 demands, that issuers must notify **Banco de España** if annual volume exceeds **1 million EUR**. bde+1

With the concept of a **Tourist Solidarity Levy** a touristic region like Calvià could effectively reduce the negative impact of overtourism to the local population with relatively low administrative and economic costs.