

Green Savings Programme

Using ETS (AAU in Czech Republic) funds for building renovation

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President

Union of Czech and Moravian Housing Co-operatives



Union of Czech and Moravian Housing Cooperatives

- is a special-interest organization of housing cooperatives in the Czech Republic;
- associates legal entities of the same professional orientation;
- represents common interests of its members towards legislative, executive and judicial powers and authorities;
- elaborates and ensures explications and interpretations of technical spheres related to the general interest of member organizations, and provides for them access to comprehensive and systematic information;
- is one of founding members of the Cooperative Association of the Czech Republic.

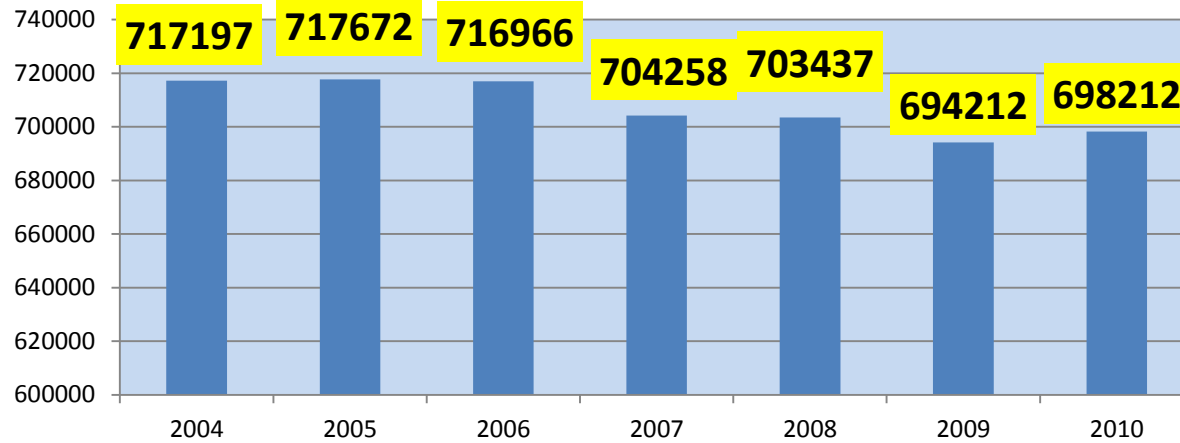
Represents the cooperative sector in ČR – associates 4 cooperative branches

- **consumer co-operatives** account for 5% of the food retail market turnover and 8% of non-food goods of daily-use retail market turnover
- despite the decline of their share of cultivated land as a result of the transformation of agriculture and the process of restitution, **agricultural co-operatives** still account for around 37% of share in total area of agricultural land
- **producer co-operatives** represent the category of small and medium-sized enterprise; they achieved a total turnover of CZK 576 Mio EUR in 2009; they are also the biggest employer of persons with reduced work capacity; 46 co-operatives of disabled persons employ 3 500 persons with reduced work capacity
- 653 **housing co-operatives** all around the country were associated with the Union. They own and administer about 700 000 housing units which represents 17% of the total housing stock.

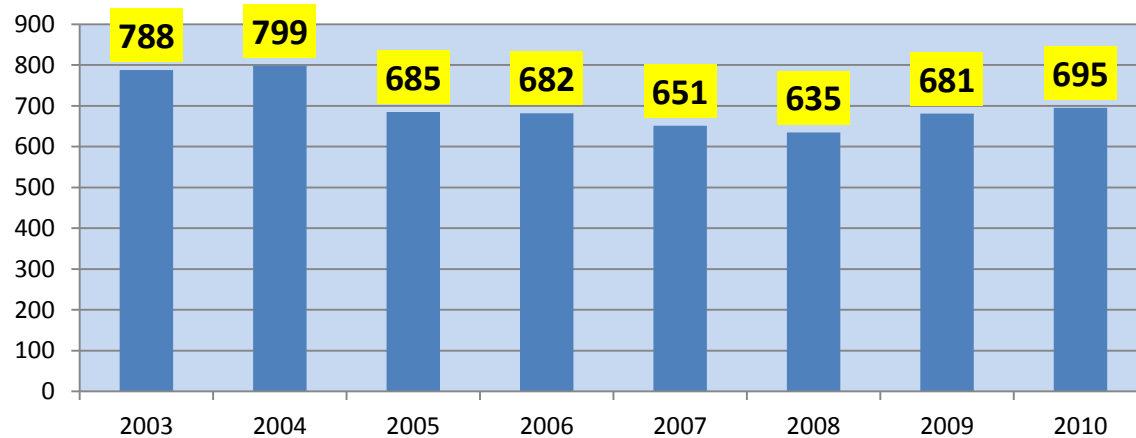
Services provided to member cooperatives

- **Economic sphere** – advisory services in accounting, taxation, capital investment, generation of funds (repair fund, financial guarantees etc.), assistance in ensuring finance for energy-saving measures, e.g. additional insulation, temperature meters, heat controllers.
- **Legal sphere** – participation in drafting legal rules and regulations. Providing members with information services as to the application of the legislation in everyday practice of housing cooperatives.
- **Technological sphere** – advisory service in construction, maintenance and repair of housing stock of member cooperatives.

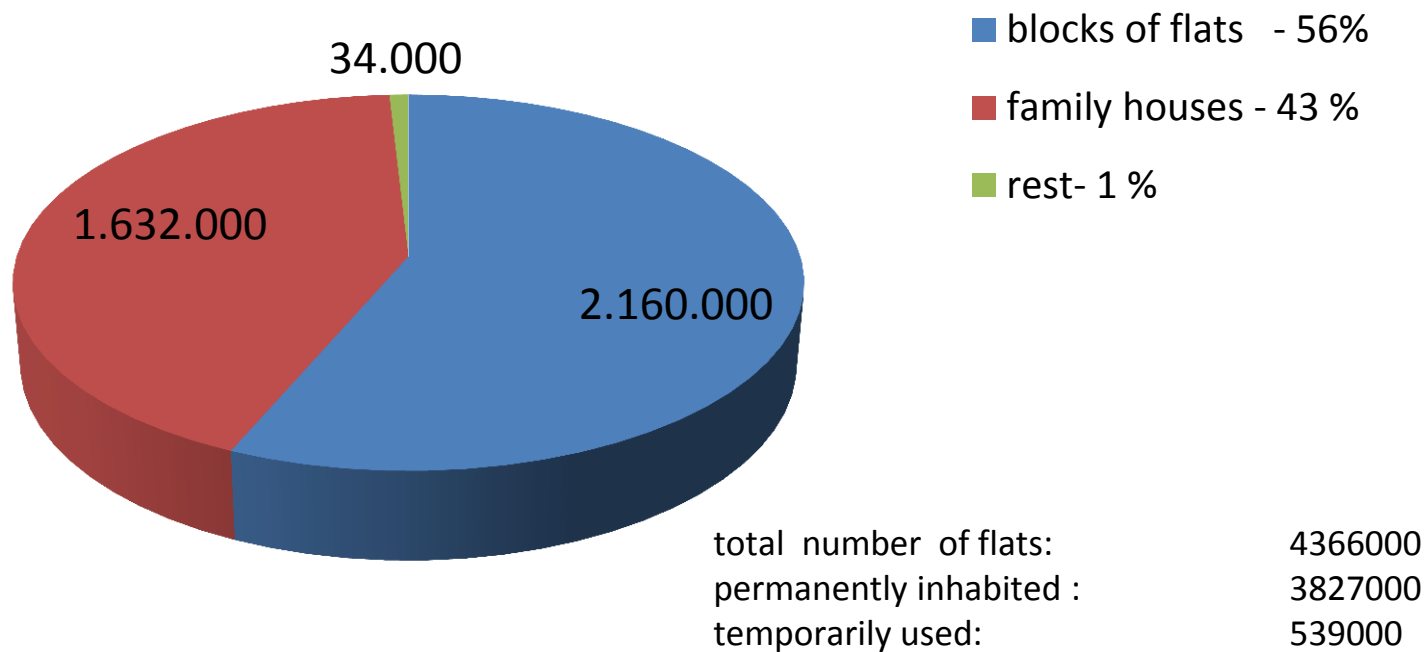
Development of managed housing units (by members of SCMBD)



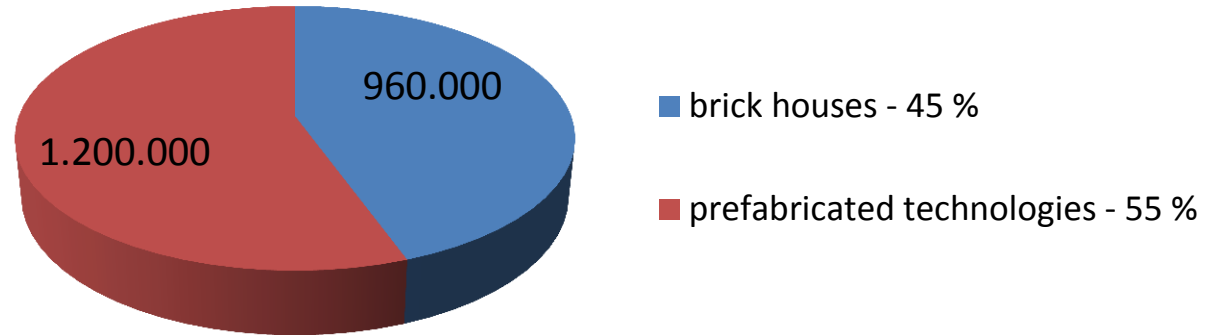
Development of housing cooperatives (number of members of SCMBD)



The structure of the housing stock in Czech Republic (1. 3. 2011)



The structure of the blocks of flats - according to technology total 2 160 000 flats



Status of prefabs – the level of reconstruction of external cladding

| Status | In Original Status | After Overall Renovation | Exchange of Windows Only | External Insulation Only |
|----------|--------------------|--------------------------|--------------------------|--------------------------|
| per cent | 23 | 30 | 33 | 14 |

Status of repair or exchange of lifts

| Status | After Installation of New Lift | General Repair of the Orig. Lift | In Original Status |
|----------|--------------------------------|----------------------------------|--------------------|
| per cent | 10 | 29 | 61 |

Growth of costs spent on renovation of one flat

| | 2006 | 2007 | 2008 | 2009 | 2010 |
|-----------------------|-------|------|-------|-------|-------|
| Costs per flat in Eur | 7.230 | 7192 | 8.269 | 8.530 | 8.820 |

Green Savings Programme



Potential of energy savings and reduction of emissions in housing of Czech Republic

| Potential of savings | Housing blocks | Prefab blocks | Green Savings Programme |
|------------------------|----------------|---------------|-------------------------|
| Number of units | 2 160 000 | 1 200 000 | 150.000 |
| Heat (PJ) | 37 | 20 | 2,5 |
| Heat (mil. EUR) | 529 | 294 | 37 |
| Dust (tons) | 1 785 | 992 | 124 |
| SO ₂ (tons) | 20 916 | 11 620 | 1 452 |
| NO _X (tons) | 6 103 | 3 391 | 423 |
| CO ₂ (tons) | 1 086 | 603 | 75 |

We assume that before the closure of this programme in 2012 our member cooperatives will be able to utilize subsidies from this programme to a large extent. We estimate that they will repair – taking into account the energy saving plans – approximately 30 – 50 thousand flats annually. Their number can reach 90 – 150 thousand in total.

Green Savings Programme

The programme is financed from the trade of the Assigned Amount Units (AAU). This system of trading with AAUs is similar to the European Union Emissions Trading Scheme (EU ETS)

The AAU is defined by the Kyoto Protocol as a tradable unit of one ton CO₂ which may be emitted by a state as greenhouse gases in the period of 2008 – 2012. The state which reduces emissions more than it has committed in the Kyoto Protocol can sell its surplus of units to other states.





Green Savings Programme

The Czech Republic has the right to sell its surplus units thanks to the fact that it reduced its greenhouse emissions by 24% in 2008 as compared with 1990, after it had committed to 8% reduction in the Kyoto Protocol.

The reduction of greenhouse gases is a consequence of the phase out of the heavy industry – as the main polluter - after the fall of the communism. The Czech Republic had 100 million units available for trading, and has signed four contracts before the end of 2009.

Green Savings Programme

The price for credits is always confidential. However, the Ministry of Environment expects the total revenue from the mentioned tradable (AAU) units to reach approximately one billion eur. As most of you know, trading with AAUs has strict rules. Revenues from credits must be utilized exclusively for financing special projects which contribute to the reduction of greenhouse gases. In the case of the Czech Republic it is the **Green Savings Programme** which was established as a special project for this purpose.



Green Savings Programme

This support is granted as a non-returnable subsidy in different amounts for different measures. The maximum amount is limited by the EU's rules on State Aid. Basic preconditions required for obtaining such subsidy is the commitment in the designed plan to reduce the need of energy for heating under the limit of 55 kWh/m² per year, and at the same time to reduce the consumption of the heat by 40% at least - after the completion of the reconstruction.



Green Savings Programme

Basic Programme Structure

The programme is divided into three basic subsidised areas:

A. Energy savings in heating

A.1. Complex insulation

A.2. Partial thermal insulation

B. Construction in the passive energy standard

C. Use of renewable energy sources for heating and hot water preparation

C.1. Replacement of environment-unfriendly heating for low-emission biomass-fired sources and efficient heat pumps

C.2. Installation of low-emission biomass-fired sources and efficient heat pumps in new buildings

C.3. Installation of solar-thermal collectors

Green Savings Programme

| The amounts of subsidies for housing co-ops from the programme | Unit of subsidy | Amount of subsidy |
|--|-------------------------------|-------------------|
| | | Estimated in EUR |
| A.1 Complex insulation (decrease of the need of energy for heating by - at least - 40%) | | |
| Complex insulation (specific heat requirement) <30 kWh.m⁻²a⁻¹ | EUR /per m² | 58 |
| Complex insulation (specific heat requirement) <55 kWh.m⁻²a⁻¹ | EUR /per m² | 40 |
| A.2 Partial thermal insulation | | |
| Partial thermal insulation– (decrease of the need of energy for heating by - at least 30%) | EUR /per m ² | 23 |
| Partial thermal insulation- (decrease of the need of energy for heating by - at least - 20%) | EUR /per m ² | 17 |
| B Construction in the passive energy standard | | |
| block of flats <u>in the passive energy standard</u> | EUR / per unit | 5 770 |
| C Use of renewable energy sources for heating and hot water preparation | | |
| Sources of biomass | Max. EUR / per unit | 960 |
| Installation of low-emission biomass-fired sources and efficient heat pumps in new buildings | Max. EUR / per unit | 770 |
| Installation of solar-thermal collectors for the preparation of hot water | Max. EUR / per unit | 960 |

Green Savings Programme

The support within the Green Savings Programme has been set up so that the funds can be used throughout the period from the programme's launch until 31 December 2012. Applications for subsidies will be admitted until 30 June 2012 or until the programme funds are completely drawn out.



Green savings programme – survey among SČMBD members (Feb. 2010)

| Measure | | Number of projects | Estimated budgeted cost |
|--------------|--|--------------------|-------------------------|
| A.1 | Complex insulation | 1 282 | 301 mil EUR |
| A.2 | Partial thermal insulation | 406 | 16 mil EUR |
| C.3 | Installation of solar-thermal collectors | 172 | 7 mil EUR |
| Total | | 1 860 | 324 mil EUR |

- **25 Oct. 2010 – closure of acceptance of applications – current resources drawn out; the programme will be reopened if further AAUnits are sold;**
- 800 mil EUR was received from the trade of AAUnits
- We assume that before the programme closure one third of co-ops applied
- Before the programme closure 72 000 applications for subsidies were submitted, 6 000 came from housing blocks (about 168 000 flats)

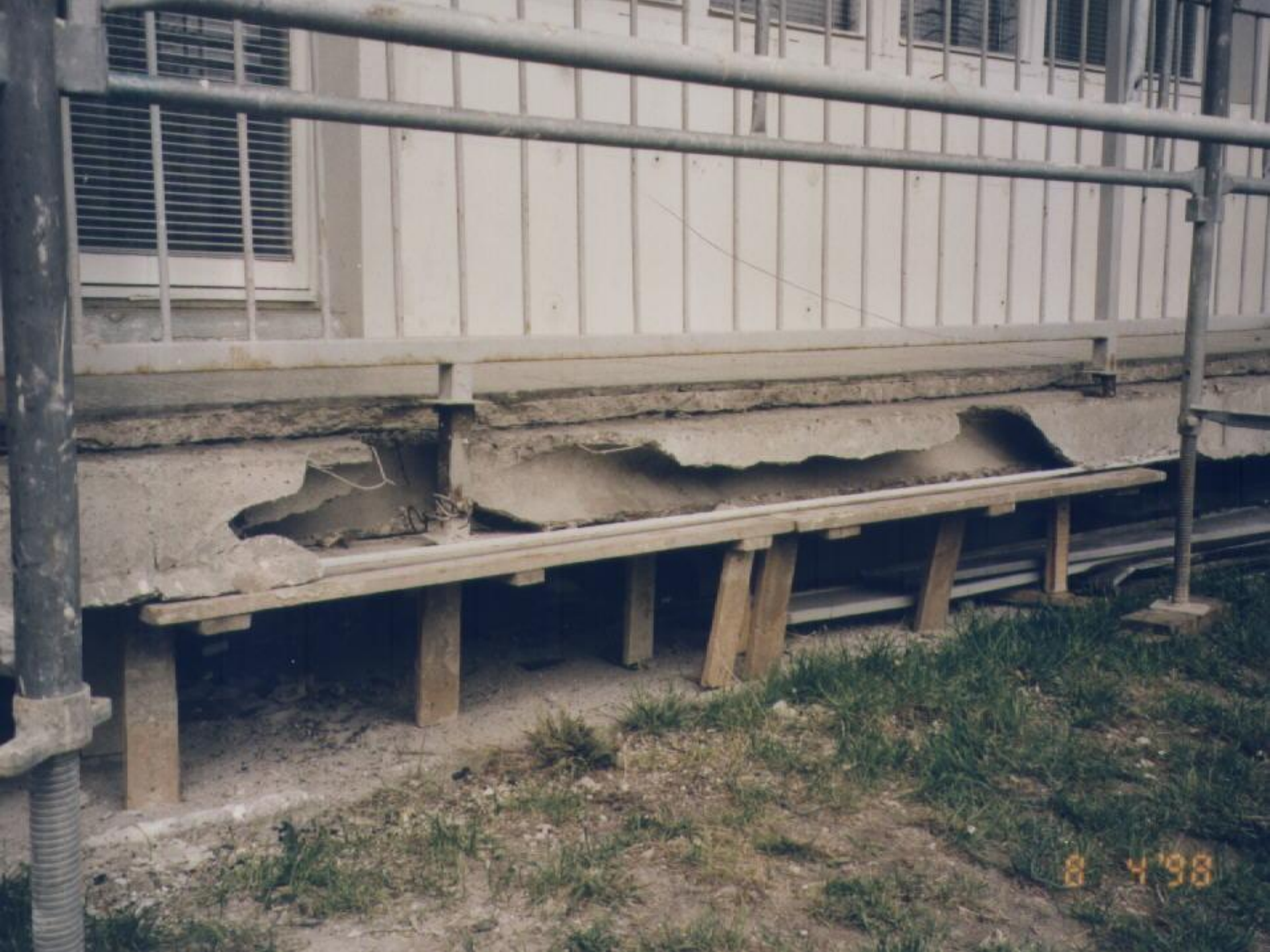
Not only energy saving, but also repairs and reconstructions

- Static defects of the structures
- Corrosion of the armature
- Water leakages
- Occurance of mould or mildew
- Defects of prefabricated parts on balconies and loggias,
- Poor insulation









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LIFTS – SAFETY OF OPERATION; SAVINGS





THANK YOU FOR YOUR ATTENTION

Vit Vanicek

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