

Traditional tasks and new activities of CARBURA

ESPA Petroleum Day 2023 – New challenges for stockpiling agencies

Matthias Rufer || matthias.rufer@carbura.ch || +41 44 217 41 48

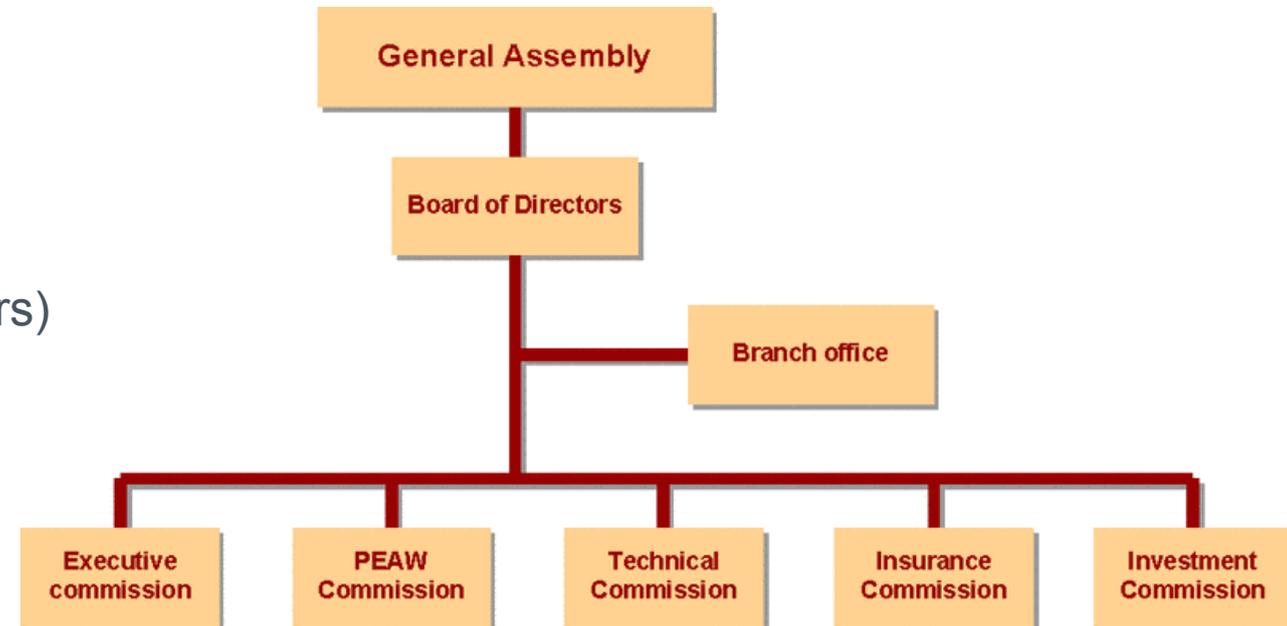
(Oil) Stockholding in Switzerland

- **Public Private Partnership since the 1930ies**
 - State sets targets and framework conditions, importers hold stocks
 - Stockholding contract & import permit
- **Products only, storage inland, no tickets**
 - Compulsory stocks to met demand of consumers
 - 4.5 months of mogas, diesel and heating oil, 3 months of jet fuel
- **Consumer financed**
 - Stockholding fee, 0.003 – 0.009 CHF/liter
- **Compulsory stocks property of importers, commingled storage**
 - Integrated in logistical chain
 - Commercial stocks on top of compulsory stocks
- **CARBURA coordinates oil stockholding**
 - «Self-help» organisation, founded by importers
 - Market- and cost-neutral implementation of oil stockholding



CARBURA - Organisation

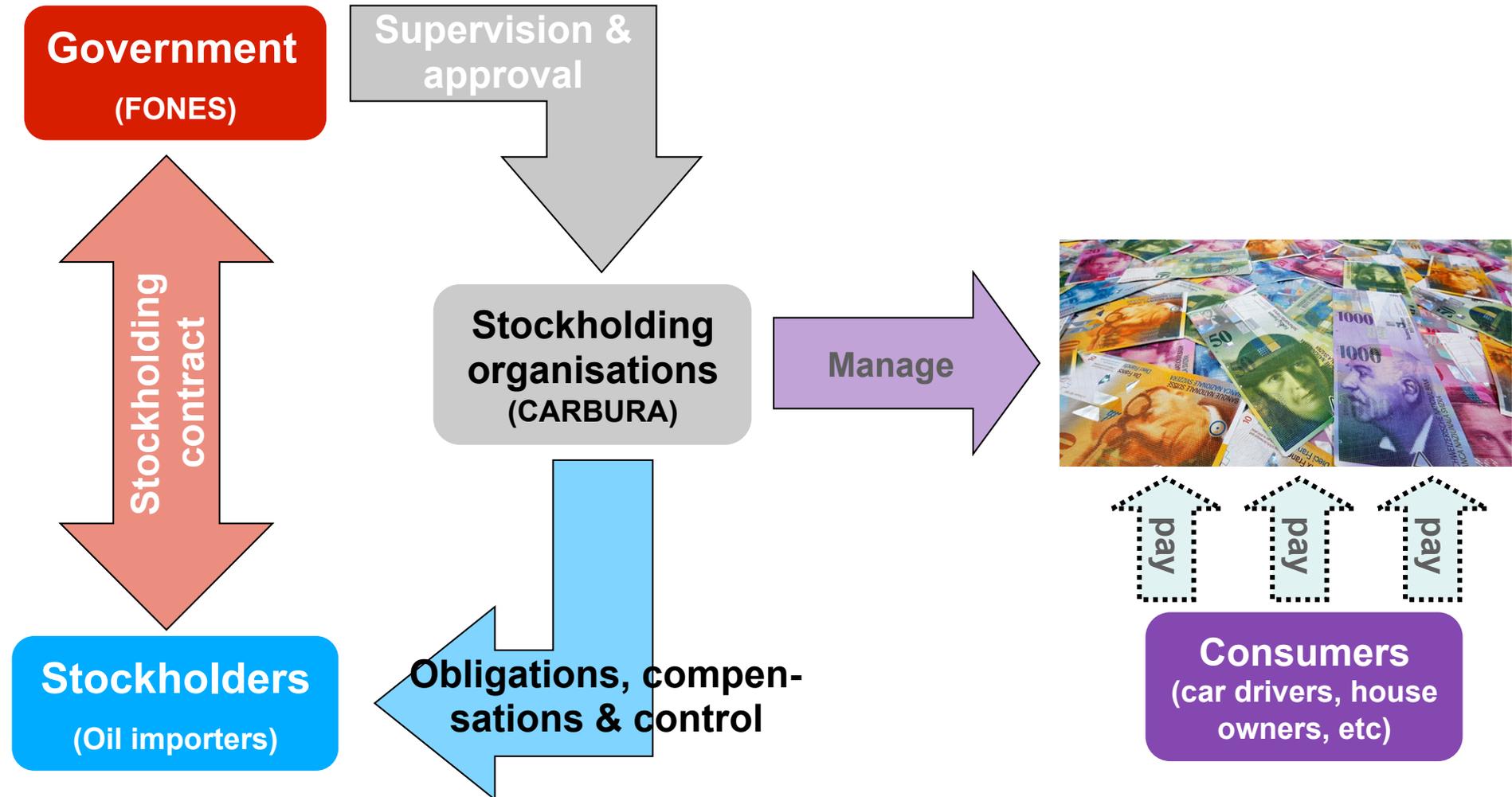
- **(Private law) Association**
 - ~50 oil importers = compulsory members
- **Annual General Assembly (~1'000 votes)**
- **Governing Board (Board of Directors)**
 - 8 – 11 oil industry representatives (stockholders)
 - 1 chairman (neutral, i.e. no market participant)
 - 1-2 government representatives (observer)
- **Committees supporting Governing Board**
- **Branch office (daily business)**



CARBURA - functions

- **On behalf of the government**
 - Import permits
 - Stock controls
- **On behalf of the members**
 - **Co-ordination and management** of oil stockholding
 - Individual obligations, stock transfers, storage contracts, financing, stockholding programmes
 - Collection of **stockholding fees** from importers
 - Payment of **compensations** for stockholding costs to stockholders
 - Operational costs, financing costs; infrastructure investments, tank farm dismantling
 - Development and update of technical basics documents
 - Participation in the National Economic Supply Organisation (→ security of supply)
 - Oil statistics / IEA data contact

The Swiss stockholding triangle



Stock releases in Switzerland

- **Paradigm change in 1991**
 - No stock releases from 1938 to 1990, only demand restraint
- **6 stock releases since 2010 → combination of events**



Year	Duration	Product	Volume	Reasons
2010	1 month	Jet fuel	9'600 m ³	Strikes in France
2015	1.5 months	Mogas, Gasoils	140'000 m ³	Outage of remaining Refinery , closure, low Rhine waters
2018	3 months	Mogas, Jet, Diesel	264'000 m ³	Low Rhine waters , rail problems domestic and abroad, refinery outage Germany, limitations on product pipeline
2019	2 months	Jet	5'400 m ³	Biggest supply tank farm not available for 2 months, rail problems on alternate routes, prolonged refinery maintenance
2023	1.5 months	All products	57'000 m ³	IEA Collective Action
2022	2 months	All products	472'000 m ³	Low Rhine waters , rail problems Germany, refinery outages Austria and Germany
2022/23	4 months	Jet	38'000 m ³	Strikes in France (2x), contamination problems

Release procedure

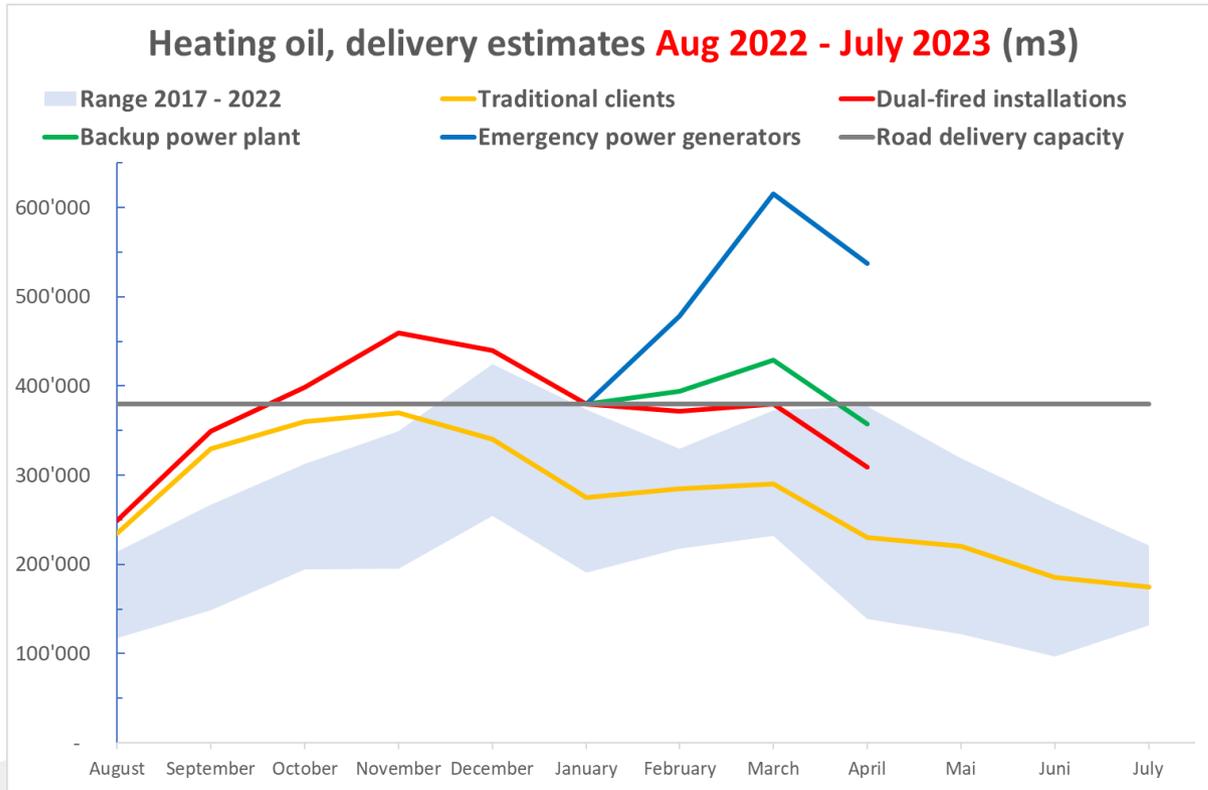
- **Optimised from release to release**
 - Oil industry experts **estimate supply loss** per product and submit **release volume** request to administration (typically 4 week period)
 - After approval of authorities, distribution to stockholders based on **import share** (2 week periods!)
 - Stockholder accept (fully or in part) or decline offer, may ask for additional volumes
 - «declined» volumes go to **pool** from which additional requests are met
 - **Release agreement** between CARBURA and stockholder, agreed volumes must be released (no hoarding)
 - Price formula ensuring that compulsory stocks not cheaper than imports
 - **Bi-weekly procedure** (first week «offer», second week «pool»)
- **Stock release in (physical) supply shortages well established and efficient**

Lessons learnt from 2022

- **Black Swan events can happen**
 - combined power, gas and oil shortage
 - **Oil as backup for power and gas**
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- Logistical challenges during peak demand**
- **Logistical challenges during power shortages and blackouts**
 - Supply of „blue-light organisations“ and other critical service providers or infrastructure operators
 - **Business Continuity Management** not topic for stockholding
 - Blackouts typically much shorter than average size of commercial stocks
 - Product available but will it reach the customers on time?
 - **No communication, no electronic payment during blackouts**
 - Preparation needed now – **bottom up**
 - **Neither the Swiss state nor CARBURA own stocks or transport equipment**
 - Supply always through oil market participants
 - „**AORS-Guidelines**“ (Authorities and Organisations for Rescue and Security)

Potential peak demand

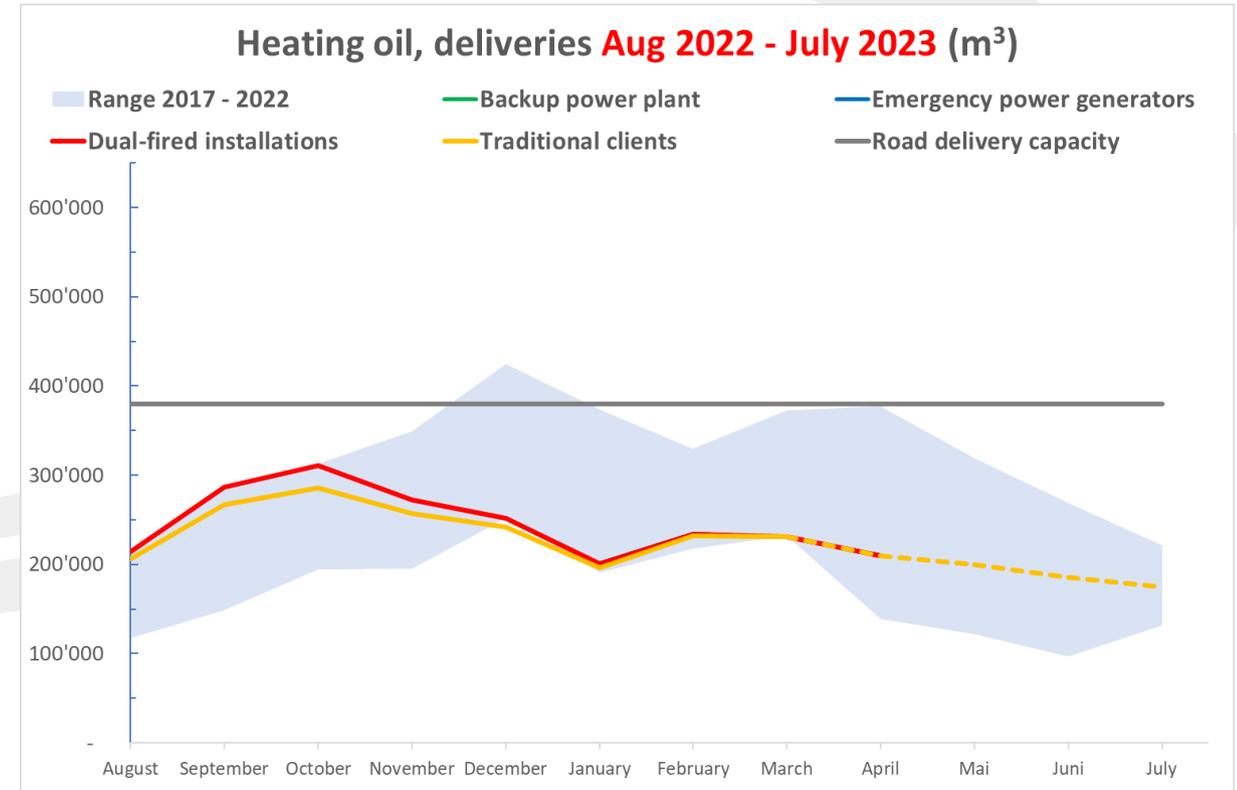
What we feared (September 2022)



Worst case: Massive fuel switching

→ Insufficient road delivery capacity

What happened (up until March 2023)



Warm winter, no fuel switching & backup power gen.

→ no problem! (→ winter 2023/2023)

→ no problem?? (→ winter 2023/2024)

Leitfaden zur Treibstoffversorgung der Kantone bei Stromausfall

Sicherstellung einer widerstandsfähigen Tankstelleninfrastruktur zur Aufrechterhaltung der Mobilität von Behörden und Organisationen für Rettung und Sicherheit bei Stromausfall.

Guide sur l'approvisionnement en carburant des cantons en cas de panne d'électricité

Assurer une infrastructure de stations-service résiliente afin de garantir la mobilité des autorités et organisations chargées du sauvetage et de la sécurité en cas de panne électrique

Guideline for the fuel supply to cantons in the event of power cuts or blackouts
→ AORS Guidelines

AORS guidelines

- **Switzerland is a federal state**
 - Crisis management task of cantonal, regional and or communal bodies
 - (Federal plans for retrofitting certain filling stations with backup generators stopped around 2018)
 - Different responsibilities and chains of command (e.g. fire fighters, police, ambulances, etc.)
- **Preparation for blackouts is duty of cantons and the individual organisations**
- **AORS Guidelines as a tool for cantons**
 - focus gasoline and diesel (vehicles) but applicable to other consumers as well
- **3 step process**
 1. Get **support** and resources from cantonal executives
 2. Collect and analyse the **facts**
e.g. what AORS, what fuel needs, existing supply patterns, „blackout-proved“ filling stations
 3. Define and implement **preparatory measures**
e.g. select filling stations & update with generators or interfaces, conclude prioritisation and/or supply contracts, prepare operations procedures for filling stations [operating hours, **security**, prioritisation etc.]

Conclusions

- **Well established oil stockholding system, efficient stockrelease during supply shortages**
- **(Short-time) power shortage or blackouts no supply shortage and reduce oil consumption but still pose severe logistical challenges to the oil market**
 - Supply for „blue-light organisations“ and other critical service providers or infrastructure operators
 - Will only function reliably if **prepared in advance (→ no communication!!)**
 - Supply also in crisis situations always by oil market participants (→ no backup trucks or drivers)
 - Role of stockholding organisation depends on specific situation (→ none in Switzerland, except for consulting and knowledge sharing)