silver ball
SOLUTIONS

Tesla Gigafactory Berlin-Brandenburg

The permitting story, November 2019 – March 2022

Site choice · milestones · § 8a early-start approvals · nature protection · amicus brief on acceleration – lessons learned

October 2026 · Jos Dings · Silver Ball Solutions



Sept 2019: flying over the site in ‘Anushka’, “the world’s slowest plane”



March 2022: Chancellor Olaf Scholz opening the factory

From Stasi depot to Gigafactory

How it started



GDR era: the Stasi's central depot – intercepted Western parcels, confiscated Trabants and other belongings of people who fled

How it's going



2024: Gigafactory Berlin Brandenburg building Model Y since March 2022

Photos: confiscated private cars, Stasi complex Freienbrink (via bpb Deutschland Archiv); Ot, CC BY 4.0, Wikimedia Commons. Sources: Tagesspiegel 2019 ("Wo Tesla bauen will"); bpb 19 Jun 2020.

What Giga Berlin is: cars, drivetrains and – from 2027 – battery cells



1 Vehicle factory

Press shop, casting, body, paint and final assembly of the Model Y. Permitted for 500,000 cars a year; over 200,000 built in 2025, >10,000 jobs.

2 Drivetrain factory

Electric drive units for the cars built next door.

3 Cell factory

‘4680‘ cells from 2027, 18 GWh a year, 1,500+ jobs.

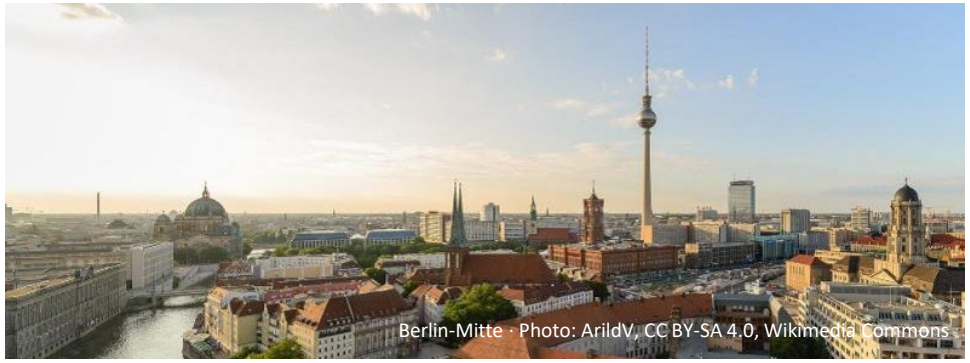
“This will enable 18GWh of annual 4680 cell production” – André Thierig, plant manager

€ Total investment: c. €5.8 billion

2021 estimate, confirmed by Brandenburg’s economy ministry

Sources: LfU permit 4 Mar 2022; dpa 16 Mar 2021; electrive 13 May 2026; Battery-News 2 Oct 2026. Workforce c. 11,700 (mid-2026, excl. cell factory).

Why Grünheide? A ready site next to Berlin, and a state promising speed



Berlin-Mitte · Photo: ArildV, CC BY-SA 4.0, Wikimedia Commons



1 **The only large site near a big city that was ready to go**

300 ha already zoned for industry since 2004 (B-Plan 13, drawn up for BMW, which chose Leipzig). Berlin itself could not offer even 100 ha. Motorway A10, Berlin–Frankfurt (Oder) rail line and BER airport on the doorstep.

State of Brandenburg: *„seit rund 20 Jahren rechtlich für eine Industrieansiedlung gesichert“*

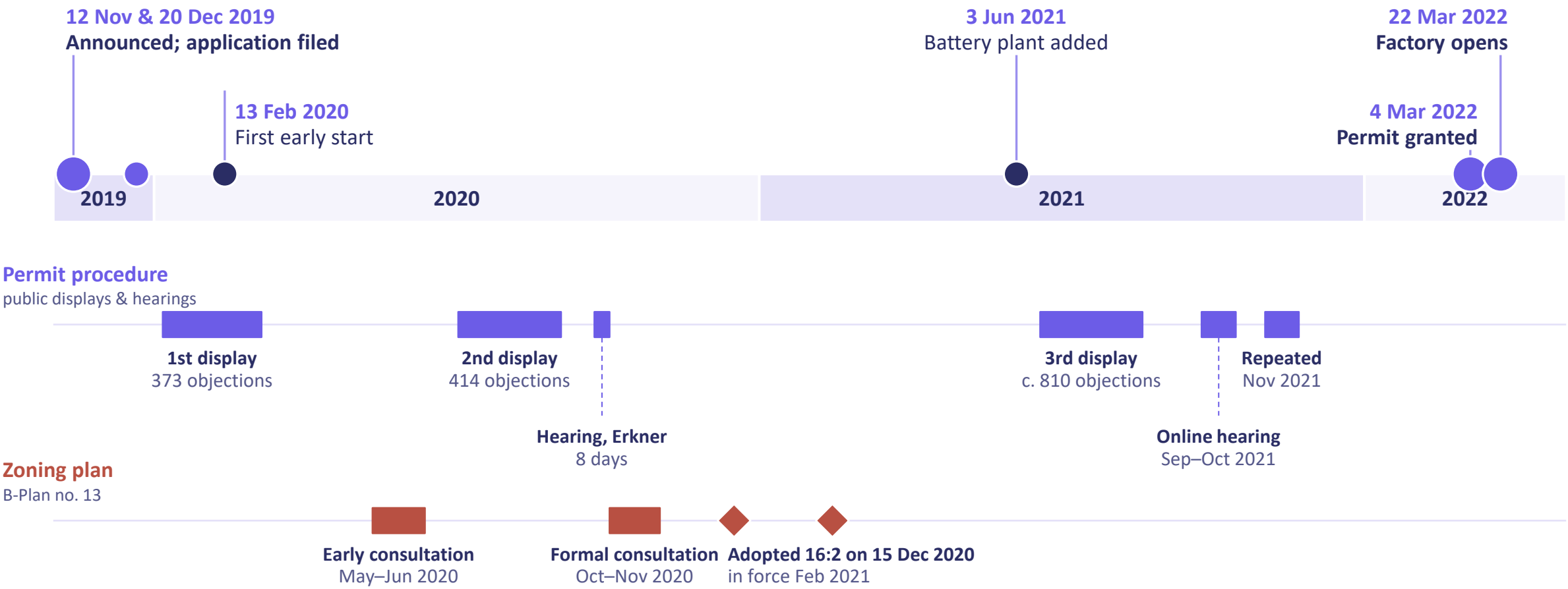
2 **Brandenburg offered speed: build first, permit later (§ 8a)**

A state task force within 10 days of the announcement (22 Nov 2019); the first early-start approval to clear the forest came eight weeks after the application (13 Feb 2020). Tesla could build at its own risk while the full permit was pending.

Tesla, April 2021: *„Eine der Stärken des deutschen Genehmigungsverfahrens ist … die Nutzung des sogenannten ‚§ 8a‘-Verfahrens.“*

Sources: Staatskanzlei Brandenburg FAQ; Tagesspiegel 12 Dec 2019 (Berlin Partner); Wikipedia (de); Tesla amicus brief 7 Apr 2021; map data © OpenStreetMap contributors. No public record of Brandenburg's bid itself.

843 days from site announcement to factory opening



Sources: Staatskanzlei Brandenburg (FAQ, press release 4 Mar 2022); LfU permit 30.078.00/19/3.24G/T13. Bars show the display or consultation period.

Everything in parallel: § 8a allows building before the permit, at your own risk

1 Apply	2 Check	3 Approve	4 Build	5 Decide
Full permit application filed; separate § 8a request for a defined package of works	Agency tests three conditions for that package only – not the whole project	Agency 'should' approve if met; adds conditions and can demand security	Works go ahead while public display, objections and hearings continue	Permit granted – or refused: tear down and restore the site at own cost

Three conditions, all required (§ 8a(1))

1. **Positive prognosis**
   The permit is expected: *„mit einer Entscheidung zugunsten des Antragstellers gerechnet werden kann"*
2. **Interest in speed**
   A public interest or a justified interest of the applicant in starting early.
3. **Undertaking**
   The applicant commits to pay for all damage and, if refused, to *„den früheren Zustand wiederherzustellen"*

What it is – and what it is not

- **Not a permit.** State of Brandenburg: *„Bei der Zulassung handelt es sich nicht um eine Genehmigung"*
- **Building and testing only,** no production: the 15th approval allowed function tests, not car making.
- **Revocable at any time;** security can be required – Tesla posted €100 million.
- **Can be challenged in court:** NGOs tried three times (slides 12–13).
- **Tesla used it 19 times,** so the factory was almost complete when the permit came.

Sources: § 8a BImSchG (gesetze-im-internet.de); LAI guidance on early start; Staatskanzlei Brandenburg FAQ.

Building at own risk: 19 early-start approvals under § 8a BImSchG



1	13 Feb 2020	Clear c. 90 ha of forest (→ court)
2	9 Mar 2020	Remove topsoil, level the site
3	26 May 2020	Foundations, pipes, excavation pits
4	13 Jul 2020	Foundation, earth and shell works
5	17/21 Aug 2020	Pile foundations
7	9 Nov 2020	Load-bearing structures, casting & press shop
6	30 Nov/2 Dec 2020	Clear 82.8 ha (→ court) · paint shop
9	23 Dec 2020	Subject not confirmed by primary source
8	12/23 Feb 2021	Machinery paint shop, press, body shop
10	31 Mar 2021	Strip forest soil, level 80 ha
11	12 Apr 2021	Water, sewage and power lines
13	12/27 May 2021	Warehouse; tests (partly unclear)
12	19 May 2021	Final assembly installations
14	1 Jun 2021	Function tests casting, paint shop (→ court)
15	13 Sep 2021	Rainwater infiltration basins
17	13 Sep 2021	Building parts, incl. battery building
16	28 Sep/22 Oct 2021	Tanks, sprinklers
18	8 Oct 2021	Build and test installation parts
19	26 Oct 2021	Last approval; addendum 7 Feb 2022

„Insgesamt 19 Zulassungen“ from 20 applications (press release 4 Mar 2022); numbering follows the list in the permit (Z0–Z18) and is not chronological. Sources: LfU permit, MLUK press releases, electrive, teslamag.

Nature: worst-case approach saved almost year

A full survey of protected species needs a whole breeding and growing season – a year's delay.

Specialised ecology consultants instead assessed the habitat's potential, assumed every suitable spot was occupied, and sized compensation for the highest possible numbers of lizards, snakes, bats and birds.

NGOs objected: *„Bislang gibt es lediglich eine Potentialanalyse."*

Race against the breeding season: on 20 Feb 2020 the higher administrative court lifted its stop, and the first 90 ha were cleared before the felling ban from 1 March.



Bat bunker near Mönchwinkel
An old bunker, about 6 km from the site, dug out and converted into a frost-free winter roost for bats.

Sources: NGO submission 5 Mar 2020; OVG press releases 20 Feb 2020 and 46/20; LTO; taz 19 Dec 2020; Tagesspiegel 23 Jul 2020.

Nature: the actions

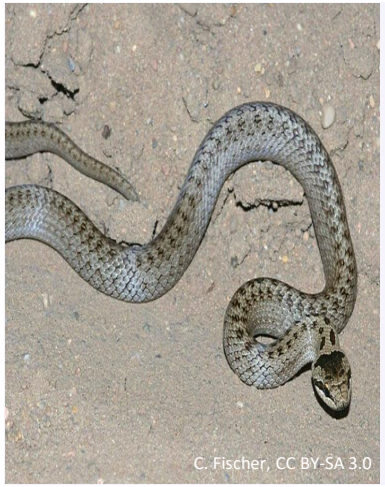


A single pine left standing in the cleared forest: the last hibernating bat



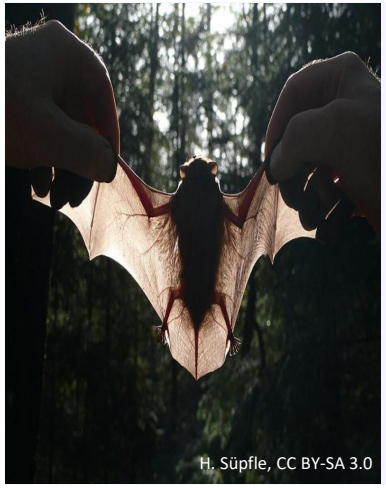
Sand lizards

Habitats fenced; animals lured under 400 sun-warmed metal sheets, caught and moved to new habitat.



Smooth snakes

Same capture and relocation. By Dec 2020: 17 lizards and 14 snakes moved



Bats

Every tree checked before felling; the only two occupied roosts were spared until the bats had left.



Boxes and forest

c. 400 bird and bat boxes; 520 ha of mixed replacement forest (≈ 3:1); wood-ant colonies moved.

Sources: Tagesspiegel/dpa 12 Feb & 23 Jul 2020; teslamag Apr 2020; taz 19 Dec 2020; WinFuture 6 Sep 2022. Species photos: Wikimedia Commons.

February 2020: the court backs the ‘worst case’ approach

Grüne Liga Brandenburg & VLAB v. state environment agency (LfU)

14 Feb: administrative court dismisses · 15 Feb: higher court halts clearing · 20 Feb: higher court dismisses, final (OVG 11 S 8/20)

1 Clearing counts as a reversible start

“It makes a considerable difference whether a long-grown natural forest is removed or, as here, a commercial forest that is also zoned as a future industrial area.”

Rn 15

2 No need to wait for the objection deadline

The agency had the full application, the impact assessment and its experts’ views, so it “could assume that completing public participation would yield no decisive further insights.”

Rn 21

3 Tesla was open from the start

“Tesla pursued a proactive information policy.”

Rn 24

4 The worst-case survey is sound

Winter site visits plus a worst-case assumption: “This methodological approach cannot be faulted.” All relevant species were taken into account.

Rn 28

5 Time is a public interest

Jobs in a region with high unemployment and a shrinking population. “Given the scale of the project and its knock-on effect on others in the region, time is a decisive factor.”

Rn 49–50

6 The balance favours clearing

Zoned for industry anyway, commercial forest, a heavily wooded district – and replanting with 30% broadleaf trees will create more valuable forest.

Rn 53

Source: OVG Berlin-Brandenburg, decision of 20 Feb 2020, OVG 11 S 8/20 https://gesetze.berlin.de/perma?d=NJRE001413659 · quotes translated from German · Rn = paragraph.

Seveso classification: the slowest file in the permit

Report 1 Dec 2019

Tesla's own hazard analysis

Filed with the application. Rated the accident scenarios as very unlikely. The ministry later listed a report to classify the plant under the Störfallverordnung as still missing.

Report 2 5 May 2021

Second opinion (Müller-BBM)

Demanded by the LfU after objections. Effects *„bei drei der fünf … Szenarien deutlich gravierender“*: explosive solvent clouds in the paint shop, hydrogen fluoride from a coolant fire.

Report 3 late 2021 – early 2022

Revised report after the battery plant

Plans changed in June 2021, so the hazard case had to be redone. Early 2022, ministry: *„Die Sicherheitsabstände werden nicht mehr hinterfragt.“*

It held up the permit
April 2021, ministry: *„Wir warten auf ein Sachverständigengutachten zur Störfallproblematik.“*

Outcome, 4 March 2022
Lower tier: the plant *„fällt … unter die Vorschriften der Störfallverordnung“* – safety concept, safe distances, public information. Upper tier only after the 2024 expansion.

Sources: Tagesspiegel 21 & 27 Apr, 25 May, 4 Jun 2021; t3n 21 May 2021; teslamag 26 May 2021; nd (early 2022); LfU press release 4 Mar 2022; dpa 22 Oct 2023. Author of report 3 not public.

Water: unclear why precisely this became controversial





1.4 m m³ → 0.3 m m³

Contracted volume vs. actual use in 2025: 304,734 m³

Lignite: 100 m m³

Brandenburg's lignite miner LEAG uses two orders of magnitude more water: about 70× Tesla's planned volume and **over 300× its 2025 use**.

Water supply was not part of Tesla's permit.
Tesla buys its water under a private-law supply contract with the Wasserverband Strausberg-Erkner (WSE), signed in October 2020. The authority only checked that supply was feasible; the WSE judged it solvable. Pumping rights are the WSE's own water permits.

Sources: OVG Berlin-Brandenburg, OVG 11 S 8/20, Rn 43; ZfK 19 Jul 2020, 16 Oct 2020; dpa 1 Sep 2026; chart: rbb24, companies' own figures.

Tesla's amicus brief: public plea for legal changes, April 2021

7 April 2021

Tesla writes to a court in a climate case it is not even a party to

16 months

after applying – and still no date for the permit

No legal effect

but it set the tone for Germany's permit-acceleration debate

In Tesla's words

- *„Hindernisse im deutschen Genehmigungsrecht … verlangsamen" die Verkehrs- und Energiewende.*
- *Klimaschutzprojekte und Kohlekraftwerke werden „gleich behandelt".*
- *„Eine der Stärken … ist … die Nutzung des sogenannten ‚§ 8a'-Verfahrens."*

Source: Tesla Manufacturing Brandenburg SE, amicus brief to OVG Berlin-Brandenburg (11 A 22/21), 7 Apr 2021, via teslamag.de.

The amicus brief: ten proposals and the reactions

Tesla's ten proposals

1. Distinguish sustainable from unsustainable projects
2. A fast track for sustainable projects
3. A project manager empowered to set binding deadlines
4. Weigh indirect climate effects
5. Expand early-start approvals (§ 8a)
6. Flexibility for small changes that improve the environment
7. A national pool of specialist experts
8. Mandatory digitalisation
9. Standards for documentation
10. Refocus public participation: fewer mass hearings

Reactions

Brandenburg environment ministry
„Rechtlich kann es … keine Unterscheidung zwischen scheinbar klimafreundlichen und eher klimabelastenden Investitionen geben, denn das Recht ist nicht teilbar.“ (**RED3 makes this distinction mandatory now**)

Bareiß, federal economy ministry
Knows *„kein anderes Projekt, für das auf allen Ebenen so viel getan wurde“*

DUH, Jürgen Resch
„segensreich“ for the debate, but: *„Wir hätten das nicht geschrieben.“*

BDI (industry)
Calls for an *„Entschlackungskur“* of planning law.

Die Linke, Görke
Tesla should *„mit Generalkritik zurückhalten“* while it pays its bills late.

Sources: brief (teslamag.de), Tagesspiegel 9 Apr 2021, Berliner Zeitung, dpa/finanzen.net, zfk.de, autohaus.de.

Lessons from Grünheide

1

§ 8a made it possible – but needs risk appetite

Building at own risk, with a €100 million deposit and a duty to tear it all down, is what made 843 days work. Few investors – and few authorities – will take that risk.

2

Nature was not the bottleneck

The worst-case approach saved a year of surveys. Court stops cost days, not months: the forest was cleared before the 1 March felling ban.

3

Bottleneck 1: Mundane things

The Seveso classification took over a year. A 23,700-page file in 66 binders, printed and stamped in several copies, and two extra public displays after Tesla's own plan changes.

4

Bottleneck 2: nobody had done this before

Tesla had never run a European permit procedure – in its own words a long *„Trial-and-Error"-Prozess*. The state environment agency had no track record with car plants and had to add staff during the procedure.

Sources: as on previous slides; Tesla amicus brief 7 Apr 2021; LfU press release 4 Mar 2022; Task Force Tesla minutes 28 Jul 2021.